

```

1 GTCTCGTGTA TGGCGTGGTT AAGGTTGCAG CCTCTCACCT CTGCCTTCCT
51 CCATTTTGGG CTGGTTACCT TTGTGCTCTT CCTGAATGGT CTTCGAGCAG
101 AGGCTGGTGG CTCAGGGGAC GTGCCAAGCA CAGGGCAGAA CAATGAGTCC
151 TGTTTCAGGT CATCGGACTG CAAGGAGGGT GTCATCCTGC CAATCTGGTA
201 CCCGGAGAAC CCTTCCCTTG GGGACAAGAT TGGCAGGGTC ATTGTCTATT
251 TTGTGGCCCT GATATACATG TTCCTTGGGG TGTCATCAT TGCTGACCGC
301 TTCATGGCAT CTATTGAAGT CATCACCTCT CAAGAGAGGG AGGTGACAAT
351 TAAGAAACCC AATGGAGAAA CCAGCACAAC CACTATTCCG GTCTGGAATG
401 AAAGTGTCTC CAACCTGACC CTTATGGCCC TGGGTTCCCT TGCTCCTGAG
451 ATACTCCTCT CTTTAATTGA GGTGTGTGGT CATGGGTTCa TTGCTGGTGA
501 TCTGGGACCT CTACCATTG TAGGGAGTGC AGCCTTCAAC ATGTTTCATC
551 TCATTGGCAT CTGTGTCTAC GTGATCCCAG ACGGAGAGAC TCGCAAGATC
601 AAGCATCTAC GAGTCTTCTT CATCACCGCT GCTTGGAGTA TCTTTCCTA
651 CATCTGGCTC TATATGATTG TGGCAGTCTT CTCCCCTGGT GTGGTCCAGG
701 TTTGGGAAGG CTTCTTCACT CTCTTCTTCT TTCCAGTGTG TGTCCTTCTG
751 GCCTGGGTGG CAGATAAACG ACTGCTCTTC TACAAATACA TGCACAAAAA
801 GTACCGCACA GACAAACACC GAGGAATTAT CATAGAGACA GAGGGTGACC
851 ACCCTAAGGG CATTGAGATG GATGGGAAAA TGATGAATTC CCATTTTCTA
901 GATGGGAACC TGGTGCCCTT GGAAGGGAAG GAAGTGGATG AGTCCCGCAG
951 AGAGATGTAG CGGATCCTCA AGGATCTGAA GCAAAAACAC CCAGAGAAGG
1001 ACTTAGATCA GCTGTGGGAG ATGGCCAATT ACTATGCTCT TTCCCACCAA
1051 CAGAAGAGCC GCGCCTTCTA CCGTATCCAA GCCACTCGTA TGATGACTGG
1101 TGCAGGCAAT ATCTGAAGA AACATGCAGC AGAACAAGCC AAGAAGGCCT
1151 CCAGCATGTAG CGAGGTGCAC ACCGATGAGC CTGAGGACTT TATTTCCAAG
1201 GTCTTCTTTG ACCCATGTTT TTACCACTGC CTGGAGAACT GTGGGGCTGT
1251 ACTCTTGACA GTGGTGAGGA AAGGGGGAGA CATGTCAAAG ACCATGTATG
1301 TGGACTACAA AACAGAGGAT GGTCTGCCA ATGCAGGGGC TGAATATGAG
1351 TTTACAGAGG GCACGGTGGT TCTGAAGCCA GGAGAGACCC AGAAGGAGTT
1401 CTCCGTGGGC ATAATTGATG ACGACATTTT TGAGGAGGAT GAACACTTCT
1451 TTGTAAAGTT GAGCAATGTC CGCATAGAGG AGGAGCAGCC AGAGGAGGGG
1501 ATGCCCTCCG CAATATTCAA CAGTCTTCCC TTGCCTCGGG CTGCTCCTAGC
1551 CTCCCCTTGT CTGCCACACG TTACCATCTT GGATGATGAC CATGCAGGCA
1601 TCTTCACTTT TGAATGTGAT ACTATTCTATG TCAGTGAGAG TATTGGTGTT
1651 ATGGAGGTCA AGGTCTGCG GACATCAGGT GCCCGGGGTA CAGTCATCGT
1701 CCCCTTTAGG ACAGTAGAAG GGACAGCCAA GGGTGGCGGT GAGGACTTTG
1751 AAGACACAGA TGGGGAGTTG GAATTCAAGA ATGATGAAAC TGTGAAAACC
1801 ATAAGGGTTA AAATAGTAGA TGAGGAGGAA TACGAAAGGC AAGAGAATTT
1851 CTTCAATTGCC CTTGGTGAAC CGAAATGGAT GGAACGTGGA ATATCAGATG
1901 TGACAGACAG GAAGCTGACT ATGGAAGAAG AGGAGGCCAA GAGGATAGCA
1951 GAGATGGGAA AGCCAGTATT GGGTGAACAC CCCAACTGG AAGTCATCAT
2001 TGAAGAGTCC TATGAGTTCA AGACTACGGT GGACAACTG ATCAAGAAGA
2051 CAAACCTGGC CTTGGTTGTG GGGACCCATT CCTGGAGGGA CCAGTTCATG
2101 GAGGCCATCA CCGTCAGTGC AGCAGGGGAT GAGGATGAGG ATGAATCCGG
2151 GGAGGAGAGG CTGCCCTCCT GCTTTGACTA CGTCATGCAC TTCCTGACTG
2201 TCTTCTGGAA GGTGCTGTTT GCCTGTGTGC CCCCCACAGA GTACTGCCAC
2251 GGCTGGGCCT GCTTCGCCGT CTCATCCTC ATCATTGGCA TGCTCACCAG
2301 CATCATTTGG GACCTGGCCT CGCACTTCGG CTGCACCATT GGTCTCAAAG
2351 ATTCGGTCAC AGCTGTTGTT TTCGTGGCAT TTGGCACCTC TGTCCAGAT
2401 ACGTTTGCCA GCAAAGCTGC TGCCCTCCAG GATGTATATG CAGACGCCCTC
2451 CATTGGCAAC GTGACGGGCA GCAACGCCGT CAATGTCTTC CTGGGCATCG
2501 GCCTGGCCTG GTCCGTGGCC GCCATCTACT GGGCTCTGCA GGGACAGGAG
2551 TTCCACGTGT CGGCCGGCAC ACTGGCCTTC TCCGTACCC TCTTACCAT
2601 CTTTGCATTT GTCTGCATCA GCGTGCTCTT GTACCGAAGG CGGCCGCACC
2651 TGGGAGGGGA GCTTGGTGGC CCCCGTGGCT GCAAGCTCGC CACAACATGG
2701 CTCTTTGTGA GCCTGTGGCT CCTCTACATA CTCTTTGCCA CACTAGAGGG
2751 CTATTGCTAC ATCAAGGGGT TCTAAGCCAC AC
(SEQ ID NO: 1)

```

5'UTR: 1 - 9
Start Codon: 10
Stop Codon: 2773
3'UTR: 2776

HOMOLOGOUS PROTEINS:

Top 10 BLAST Hits:

Sequences producing significant alignments:		Score (bits)	E Value
CRA 18000005047237	/altid=gi 2498054 /def=sp P70549 NAC3_RAT SO...	1828	0.0
CRA 18000005200270	/altid=gi 4140706 /def=gb AAD04173.1 (AF107...	1342	0.0
CRA 1000682343796	/altid=gi 6453729 /def=gb AAF08988.1 AF108389...	1338	0.0
CRA 18000004939788	/altid=gi 1083801 /def=pir S43730 Na+/Ca2+-...	1335	0.0
CRA 18000005028314	/altid=gi 1279782 /def=gb AAA97928.1 (U5266...	1334	0.0
CRA 18000004968774	/altid=gi 382752 /def=prf 1901175A Na/Ca ex...	1333	0.0
CRA 18000004882912	/altid=gi 627801 /def=pir B53335 Na+/Ca2+-e...	1331	0.0
CRA 18000005218648	/altid=gi 4566522 /def=gb AAD23386.1 AF10916...	1330	0.0
CRA 18000005218651	/altid=gi 4566528 /def=gb AAD23389.1 AF10916...	1329	0.0
CRA 18000004907324	/altid=gi 479177 /def=pir S32435 Na+/Ca2+-e...	1328	0.0

dbEST:

Sequences producing significant alignments:		Score (bits)	E Value
gi 11600765	/dataset=dbest /taxon=96...	500	e-138
gi 318815	/dataset=dbest /taxon=9606 /...	216	2e-53

EXPRESSION INFORMATION FOR MODULATORY USE:

gi|11600765 Pooled (Brain, Heart, Kidney, Lung, Spleen, Testis, Leukocyte)
gi|318815 Fetal brain

Tissue expression:

Pooled tissues (Brain, Heart, Kidney, Lung, Spleen, Testis, Leukocyte)

```

1 MAWLRLQPLT SAFLHFGGLVT FVLFLNGLRA EAGGSGDVPS TGQNNESCSG
51 SSDCKEGVIL PIWYPENPSL GDKIARVIVY FVALIYMFLG VSIIADRFMA
101 SIEVITSQER EVTIKKPNGE TSTTTIRVWN ETVSNTLTLMA LGSSAPEILL
151 SLIEVCGHGF IAGDLGPSTI VGSAAFNMF IIGICVYVIP DGETRKHKL
201 RVFFITAAWS IFAYIWLMI LAVFSPGVVQ VWEGLLTLEFF FPVCVLLAWV
251 ADKRLLFYKY MHKKYRTDKH RGIIETEGD HPKGIEMDGK MMNSHFLDGN
301 LVPLEGKEVD ESRREMIRIL KDLKQKHPEK DLDQLVEMAN YYALSHQOKS
351 RAFYRIQATR MMTGAGNLIK KHAAEQAKKA SSMSEVHTDE PEDFISKVFF
401 DPCSYQCLEN CGAVLLTVVR KGGDMSKTMV VDYKTEDGSA NAGADYEFTE
451 GTVVLPKGET QKEFSVGIID DDIFEEDEHF FVRLSNVRIE EEQPEEGMPP
501 AIFNSLPLPR AVLASPCVAT VTILDDHAG IFTFECDTIH VSESIGVMEV
551 KVLRTSGARG TVIVPFRTVE GTAKGGGEDF EDTYGELEFK NDETVKTIRV
601 KIVDEEYER QENFFIALGE PKWMERGID VTDKLTTEE EAKRIAEMG
651 KPVLGHEPKL EVIIIESEYEF KTTVDKLIK TNLALVVGTH SWRDQFMEAI
701 TVSAAGDEDE ESREERLPS CFDYVMHFLT VFWKVLFAV PTEYCHGWA
751 CFAVSILIIIG MLTAIIGDLA SHFGCTIGLK DSVTAVVFVA FGTSVPDTFA
801 SKAAALQDVY ADASIGNVTG SNAVNVFLGI GLAWSVAAY WALQGQEFHV
851 SAGTLAFSVT LFTIFAFVCI SVLLYRRRP LGGELGGPRG CKLATTWLFV
901 SLWLLYLFA TLEAYCIYK F
(SEQ ID NO:2)

```

FEATURES:

Functional domains and key regions:

[1] PDOC00001 PS00001 ASN_GLYCOSYLATION
N-glycosylation site

Number of matches: 4

1	45-48	NESC
2	130-133	NETV
3	135-138	NLTL
4	817-820	NVTG

[2] PDOC00004 PS00004 CAMP_PHOSPHO_SITE
cAMP- and cGMP-dependent protein kinase phosphorylation site

Number of matches: 2

1	378-381	KKAS
2	634-637	RKLT

[3] PDOC00005 PS00005 PKC_PHOSPHO_SITE
Protein kinase C phosphorylation site

Number of matches: 11

1	113-115	TIK
2	125-127	TIR
3	597-599	TIR
4	194-196	TRK
5	267-269	TDK
6	312-314	SRR
7	460-462	TQK
8	572-574	TAK
9	594-596	TVK
10	125-127	TIR
11	597-599	TIR

[4] PDOC00006 PS00006 CK2_PHOSPHO_SITE
Casein kinase II phosphorylation site

Number of matches: 16

1	69-72	SLGD
2	106-109	TSQE
3	144-147	SAPE
4	151-154	SLIE
5	277-280	TEGD
6	312-315	SRRE
7	382-385	SMSE
8	460-463	TQKE
9	522-525	TILD
10	583-586	TYGE
11	637-640	TMEE
12	672-675	TTVD
13	691-694	SWRD
14	713-716	SGEE
15	720-723	SCFD
16	794-797	SVPD

[5] PDOC00007 PS00007 TYR_PHOSPHO_SITE
Tyrosine kinase phosphorylation site

Number of matches: 2

1	397-405	KVFFDPCSY
2	601-608	KIVDEEEY

[6] PDOC00008 PS00008 MYRISTYL
N-myristoylation site

Number of matches: 15

1	50-55	GSSDCK
2	422-427	GGDMSK
3	438-443	GSANAG
4	497-502	GMPPAI
5	557-562	GARGTV
6	571-576	GTAKGG
7	760-765	GMLTAI
8	774-779	GCTIGL
9	778-783	GLKDSV
10	816-821	GNVTGS
11	829-834	GIGLAW
12	831-836	GLAWSV
13	882-887	GGELGG
14	886-891	GGPRGC
15	890-895	GCKLAT

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	8	28	1.905	Certain
2	76	96	2.032	Certain
3	133	153	1.009	Certain
4	169	189	1.943	Certain
5	206	226	2.118	Certain
6	231	251	2.072	Certain
7	505	525	0.666	Putative
8	723	743	1.298	Certain
9	747	767	2.258	Certain
10	781	801	1.232	Certain
11	823	843	1.793	Certain
12	854	874	2.424	Certain
13	893	913	2.138	Certain

BLAST Alignment to Top Hit:

>CRA|18000005047237 /altid=gi|2498054 /def=sp|P70549|NAC3_RAT
 SODIUM/CALCIUM EXCHANGER 3 PRECURSOR (NA+/CA2+-EXCHANGE
 PROTEIN 3) /org=NA+/CA2+-EXCHANGE PROTEIN 3 /dataset=nraa
 /length=927
 Length = 927

Score = 1828 bits (4682), Expect = 0.0
 Identities = 897/927 (96%), Positives = 911/927 (97%), Gaps = 6/927 (0%)
 Frame = +1

Query: 10 MAWLRLQPLTSAFLHFGLVTFVLFLNGLRAEAGSGDVPSTGQNNESCSGSSDCKEGVIL 189
 MAWLRLQPLTSAFLHFGLVTFVLFLNGLRAEAG DVPS GQNNESCSGSSDCKEGVIL
 Sbjct: 1 MAWLRLQPLTSAFLHFGLVTFVLFLNGLRAEAGDLRDVPSAGQNNESCSGSSDCKEGVIL 60

Query: 190 PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE 369
 PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE
 Sbjct: 61 PIWYPENPSLGDKIARVIVYFVALIYMFLGVSIIADRFMASIEVITSQEREVTIKKPNGE 120

Query: 370 TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFIAGDLGPSTIVGSAAFNMFI 549
 TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFIAGDLGPSTIVGSAAFNMFI
 Sbjct: 121 TSTTTIRVWNETVSNLTLMALGSSAPEILLSLIEVCGHGFIAGDLGPSTIVGSAAFNMFI 180

Query: 550 IIGICVYVIPDGETRRIKHLRVFFITAAWSIFAYIWLYMILAVFSPGVVQVWEGLLTLFF 729
 IIGICVYVIPDGETRRIKHLRVFF+TAAWS+FAYIWLYMILAVFSPGVVQVWEGLLTLFF
 Sbjct: 181 IIGICVYVIPDGETRRIKHLRVFFVTAAWSVFAYIWLYMILAVFSPGVVQVWEGLLTLFF 240

Query: 730 FPVCVLLAWVADKRLLFYKYMHKRYRTDKHRGIIIEGTDHPKGIEMDGKMMNSHFLDGN 909
 FPVCVLLAWVADKRLLFYKYMHK+YRTDKHRGIIIEG+HPKGIEMDGKMMNSHFLDGN
 Sbjct: 241 FPVCVLLAWVADKRLLFYKYMHKRYRTDKHRGIIIEGEGHPKGIEMDGKMMNSHFLDGN 300

Query: 910 LVPLEGKEVDESRRMIRILKDLKQKHPEKDLQVLVEMANYALSHQQKSAFYRIQATR 1089
 L+PLEGKEVDESRRMIRILKDLKQKHPEKDLQVLVEMANYALSHQQKSAFYRIQATR
 Sbjct: 301 LIPLEGKEVDESRRMIRILKDLKQKHPEKDLQVLVEMANYALSHQQKSAFYRIQATR 360

Query: 1090 MMTGAGNILLKHAEEQAKKASSMSEVHTDEPEDFISKVFFDPCSYQCLENCGAVLLTVVR 1269
 MMTGAGNILLKHAEEQAKK +SMSEVHTDEPEDF SKVFFDPCSYQCLENCGAVLLTVVR
 Sbjct: 361 MMTGAGNILLKHAEEQAKKTASMSEVHTDEPEDFASKVFFDPCSYQCLENCGAVLLTVVR 420

Query: 1270 KGGDSKTMVVDYKTEDGSANAGADYEFTEGTVVLKPGETQKEFSVGIIDDDIFEDEHF 1449
 KGGD+SKTMVVDYKTEDGSANAGADYEFTEGTVVLKPGETQKEFSVGIIDDDIFEDEHF
 Sbjct: 421 KGGDISKTMVVDYKTEDGSANAGADYEFTEGTVVLKPGETQKEFSVGIIDDDIFEDEHF 480

Query: 1450 FVRLSNVRIIEEQPEEGMPPAIFNSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH 1629
 FVRLSNVR+EEEQ EEGM PAI NSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH
 Sbjct: 481 FVRLSNVRVEEQLEEGMTPAILNSLPLPRAVLASPCVATVTILDDDHAGIFTFECDTIH 540

Query: 1630 VSESIGVMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETIVKTIRV 1809
 VSESIGVMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETIVKTIRV
 Sbjct: 541 VSESIGVMEVKVLRVTSARGTIVVPFRTVEGTAKGGGEDFEDTYGELEFKNDETIVKTIRV 600

Query: 1810 KIVDEEEYERQENFFIALGEPKWMERGIS-----DVTDRKLTMEEEEAKRIAEMGKPV 1971
 KIVDEEEYERQENFFIALGEPKWMERGIS +VTDKLTMEEEEAKRIAEMGKPV
 Sbjct: 601 KIVDEEEYERQENFFIALGEPKWMERGISALLSPEVTDKLTMEEEEAKRIAEMGKPV 660

Query: 1972 GEHPKLEVIIIEESYEFKTTVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDEDEDESG 2151
 GEHPKLEVIIIEESYEFK+TVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDE+EDESG
 Sbjct: 661 GEHPKLEVIIIEESYEFKSTVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGDEEEDSG 720

Query: 2152 EERLPSCFDYVMHFLTTFVFWKLVFACVPPTEYCHGWACFAVSILIIIGMLTAIGDLASHFG 2331
 EERLPSCFDYVMHFLTTFVFWKLVFACVPPTEYCHGWACF VSILIIIGMLTAIGDLASHFG
 Sbjct: 721 EERLPSCFDYVMHFLTTFVFWKLVFACVPPTEYCHGWACFVVSILIIIGMLTAIGDLASHFG 780

Query: 2332 CTIGLKDSVTAVVFAFGTSVPDTFASKAAALQDVYADASIGNVTGSNAVNVLGIGLAW 2511
 CTIGLKDSVTAVVFAFGTSVPDTFASKAAALQDVYADASIGNVTGSNAVNVLGIGLAW
 Sbjct: 781 CTIGLKDSVTAVVFAFGTSVPDTFASKAAALQDVYADASIGNVTGSNAVNVLGIGLAW 840

Query: 2512 SVAAYIWALQGEFHVSAAGTAFSVTLFTIFAFVCSVLLYRRRPHLGELGGPRGCKLA 2691
 SVAAYIWA+QGEFHVSAAGTAFSVTLFTIFAFVCSVLLYRRRPHLGELGGPRGCKLA
 Sbjct: 841 SVAAYIWAMQGEFHVSAAGTAFSVTLFTIFAFVCLSVLLYRRRPHLGELGGPRGCKLA 900

Query: 2692 TTWLFVSLWLLYILFATLEAYCYIKGF 2772
 TTWLFVSLWLLY+LFATLEAYCYIKGF
 Sbjct: 901 TTWLFVSLWLLYVLFATLEAYCYIKGF 927 (SEQ ID NO:4)

Hmmer search results (Pfam):

Scores for sequence family classification (score includes all domains):

Model	Description	Score	E-value	N
PF01699	Sodium/calcium exchanger protein	294.6	1.2e-84	2
PF00324	Amino acid permease	2.8	5.9	1
PF01971	Protein of unknown function	2.7	8.7	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF01699	1/2	118	257 ..	12	152 .]	121.3	1.8e-32
PF01971	1/1	644	670 ..	193	222 ..	2.7	8.7
PF00324	1/1	851	877 ..	472	498 .]	2.8	5.9
PF01699	2/2	757	905 ..	1	152 []	181.4	1.5e-50

1 TTGGATGAGA TCTAAAGCAT TATTAAGAGT GGGGAGTGCA AAGAAGAAAC
51 CCTCATTTCA AAGATGAATG AGAATAATGG CATGTACAAA GGTCTGGGG
101 TGGACAGTCA CTTGGTATATA TCCAAGAGTG AACCTGAAGG CTATTGTTGT
151 TGAAATGTAA TAAGGGAGAG AGTGACGGGA TGAAGGGGGA TGAGTGGGAA
201 GCAGTGAATT CCTGCAAGGC TTTGAAGGTC ATGGGAAAGA ATTTGGTCTT
251 TATATCAAGA GCAAGAGAAG ACTACTAAAG GGCTTCAAAC AGGGGAGCGA
301 TATGCTTAAG TCTGTTTGT TGTTTTTTTA AAAAAAGATT ACGGTGGCTA
351 TATGAGGAAA GTGGAATTGA GAACTAGCGA GAGTTGGAGT GGTGAGCTCC
401 ATTAGGAGGC TACTGAAGTA GATTCATGAG GTAAGGAGTG ATGGTGGCCT
451 GGGCTGGGAT GATGGTGGTA GAAATGGAGA AAGAGTTGAT AGGATTTAGT
501 GATTGGATAA GGGACAGAAG AGAGATGAAG GCTTTCAGAC TAACATCTGC
551 TTTCTAACAT GAGTAACTGG GTGGCTGAAG ATGCTATTTT CTGAGCTGGG
601 AACAGGAGA AAAAGGAGCA AATATGGGGG ATGAAGACTT TGAGTCTTTA
651 AGGTGCTGTA CAAACACAAA TCAGCATTC TTTATTACTA AGGGTATCCC
701 ACACAGTTGT AGCAGAGGGA GAAAGATCGC CCCCCCCCCA CTTTTTTTTT
751 TTTTTTAGCT ATTCATGGT ATTTTCATTC TCATCCCAACC CAAATGAGGC
801 AGTGAGTGGT AAGATGAGTA TATAATAGTT TCAATTGCAT TTCATCCCAT
851 TCTTCTGAGC TCAAGCTCAC CTTTTAGTGG TTTGAGGCCA GTAGATGAAG
901 CTGCATATCA CCCCCAAAAT CTTGTCTCTA GTTTAACAAA ACTTATTTGA
951 GAGACATTTG CATGTTTTAT TAATAATGAT TTTTACCAC TGTCTCTTTC
1001 CATGTTTGGG TTTGAAATTT GAGTGGCTGG CGGATGATCA TCTCCTGTT
1051 ACTGCCTGCT TAAACTGCTC ATAAGCAGGT TTTACTGGAG GGCTCAGAGC
1101 TGCTGTGAAC TTGGTCTTGG GCACAACCTA CATGGCCTCT GTTTGGCTAT
1151 GGGGTGGGTG CATGTCACCA TTTATCAACT CTTTGTGATT CCCAAGCTAT
1201 CTCAGAATTA TAGCTTGCCCT CCAGAAGTCT TGCATTCGGG GAGGAAGTTT
1251 CTTTCCAAGG GAGCTCAGTT TTCAAGGTTT ATTGCTCTGT TTAATGGATG
1301 AGATCTAAAG CATTATTAAG AGTGGGGAGT GCAAAGAAGA AACACTCATT
1351 TCAAAATCGA TTGAGAATAA TGGCATGTAC AAAGGTCCCTG GGGTGGACAG
1401 TCACTTGGTA TAATCCTGGA GTGAACATGA AGGCCAAGGA AATATGTATA
1451 CATTAAACAG AGCAAGGTTT TCAATTTTCT GGGGACTAGT CCATGAAAAT
1501 TCAATTCAAT ATACTCTCTT GCAAACCTAT GTTATCCAAG ATACTCAAGT
1551 ATAATGACAA CAGGTGAAGG AAGTCCGAAC ACCCCAGAAA CAGTATAAAT
1601 GGGCATGAAG ATTCAGGTTA TACATGGCCT ATTTTAAGTT GCTTCTTGAG
1651 AACTCTCACA GGTAATACCA GTTTGGGAGA CAGGACTTGA AGGCTATTGC
1701 TGCATTTCCA TCCCAGTAT TCCCAGCTAT TTCAAGCCAT TTTTCAACGG
1751 AGTCTCCAGT AGATGGTTTG GAGGACAGAG CAGCTATTG TGCCCTCCAT
1801 TGACATCTAT TTTTCCAAGT GAGAGACTGC CCCATATGTT AGTGCAATAT
1851 GTCACGTGAG GTGAAGCATC AGTTGTATTG GTGGGAACCT GCCGTTTGCT
1901 GTCCCTTTT CTCTCATGCC TTTTCTGCC TCTCTGATCT TTTCTAGGTC
1951 TCTGGCTAT CAGGAGGACA ACTGCTGCTG CAATAGAAGC CAGTGGCTAA
2001 GTCTCGTGTA TGGCGTGGTT AAGGTTGCAG CCTCTCACCT CTGCCCTCCT
2051 CCATTTTGGG CTGGTTACCT TTGTGCTCTT CCTGAATGGT CTTCGAGCAG
2101 AGGCTGGTGG CTCAGGGGAC GTGCCAAGCA CAGGGCAGAA CAATGAGTCC
2151 TGTTCAGGGT CATCGGACTG CAAGGAGGGT GTCATCCTGC CAATCTGGTA
2201 CCCGGAGAAC CCTTCCCTTG GGGACAAGAT TGCCAGGGTC ATTGTCTATT
2251 TTGTGGCCCT GATATACATG TTCCTTGGGG TGTCATCAT TGCTGACCGC
2301 TTCATGGCAT CTATTGAAGT CATCACCTCT CAAGAGAGGG AGGTGACAAT
2351 TAAGAAACCC AATGGAGAAA CCAGCACAAAC AACTATTCCG GTCTGGAATG
2401 AAAGTGTCTC CAACCTGACC CTTATGGCCC TGGGTTCTCT TGCTCCTGAG
2451 ATACTCTCT CTTTAATTGA GGTGTGTGGT CATGGGTTCA TTGCTGGTGA
2501 TCTGGGACCT TCTACCATTG TAGGGAGTGC AGCCTTCAAC ATGTTCTATCA
2551 TCAATGGCAT CTGTGCTTAC GTGATCCAG ACGGAGAGAC TCGCAAGATC
2601 AAGCATCTAC GAGTCTTCTT CATCACCGCT GCTTGGAGTA TCTTTGCCCTA
2651 CATCTGGCTC TATATGATTC TGGCAGTCTT CTCCCTGGT GTGGTCCAGG
2701 TTTGGGAAGG CCTCTCACT CTCTTCTTCT TTCCAGTGTG TGTCTTCTG
2751 GCCTGGGTGG CAGATAAACG ACTGCTCTT TACAAATACA TGCACAAAAA
2801 GTACCGCACA GACAAACACC GAGGAATTAT CATAGAGACA GAGGGTGACC
2851 ACCCTAAGGG CATTGAGATG GATGGGAAAA TGATGAATTC CCATTTTCTA
2901 GATGGGAACC TGGTGCCCTT GGAAGGGAAG GAAGTGGATG AGTCCCGCAG
2951 AGAGATGATC CGGATTCTCA AGGATCTGAA GCAAAAACAC CCAGAGAAGG
3001 ACTTAGATCA GCTGGTGGAG ATGGCCAATT ACTATGCTCT TTTCCACCAA
3051 CAGAAGAGCC GCGCTTCTA CCGTATCCAA GCCACTCGTA TGATGACTGG
3101 TGCAGGCAAT ATCCTGAAGA AACATGCAGC AGAACAAGCC AAGAAGGCCT
3151 CCAGCATGAT CGAGTGCAC ACCGATGAGC CTGAGGACTT TATTTCCAAG
3201 GTCTTCTTTG ACCCATGTTT TTACCAAGTC CTGGAGAACT GTGGGGCTGT
3251 ACTCCTGACA GTGGTGGAGG AAGGGGGAGA CATGTCAAAG ACCATGTATG
3301 TGGACTACAA AACAGAGGAT GGTTCGCCA ATGCAGGGGC TGACTATGAG
3351 TTCACAGAGG ACACGGTGGT TCTGAAGCCA GGAGAGACCC AGAAGGAGTT
3401 CTCCTGGGGC ATAATTGATG ACGACATTTT TGAGGAGGAT GAACACTTCT
3451 TTGTAAGGTT GAGCAATGTC CGCATAGAGG AGGAGCAGCC AGAGGAGGGG
3501 ATGCCTCCAG CAATATTCAA CAGTCTTCCC TTGCTCGGG CTGCTCTAGC

FIGURE 3, page 1 of 61

3551 CTCCCCTTGT GTGGCCACAG TTACCATCTT GGATGATGAC CATGCAGGCA
3601 TCTTCACTTT TGAATGTGAT ACTATTCATG TCAGTGAGAG TATTGGTGT
3651 ATGGAGGTCA AGGTTCTGCG GACATCAGGT GCCCGGGTA CAGTCATCGT
3701 CCCCTTTAGG ACAGTAGAAG GGACAGCCAA GGGTGGCGGT GAGGACTTTG
3751 AAGACACATA TGGGGAGTTG GAATTCAGA ATGATGAAAC TGTGTAAGTA
3801 ACCTTCCTGT ATTCTGCCCC TCCCTGACCC CATCTTTTGC CATCTCTTTC
3851 TGTCTTTCTG TACTGCACTT TACAACATTT CCTTGTGTTT GTGTTAATGT
3901 CAAACTTTGG TTCCATCACA GGTATGCAGG ATCAGCAGAC ACCACTGGAC
3951 AGGTTCTGCT TCCAAACTCT TCTTCAGTTT TCTCACTTTA AATTGTTTCT
4001 GGGCAAGGAA TCCTGTGACA AGAGCTAAGG ACACAAAACA TTTTCTTCTC
4051 TGAACACAA AATGATAGCT GGTGGAGCTG TGGGATGACA GAAGTTTTGT
4101 TAGATCAGAT TTTGGAGAAT TCTTGTGACT AAGAAGGACT AGAGAAGTGC
4151 TTGGGCTCT TCTTCTCCC TTCCTCATAT GAAGGGTATC TATGAGCTTT
4201 GAAACCAATC CTTTCCATTC TGGGCAGCAA TAGCCCATCA GAACATTCTA
4251 AAGAAAACAA GTGGCATTGG CTTTGTTCCT TGGTACTATA TTGCCAGTCT
4301 CACTGTGTAA CCAGATTCCA GGCACGTCTT CTTTAATTGG GAAATTGCAA
4351 AATTGATAGA AATTTAGCAA TCTTTTAAA TGACCATAGA CTATTTAATG
4401 GTGTGAGGCT TGCCAGCCT AGTTGAATTG AGTCAGTATG GTTTGGATAC
4451 TGAAGAGTAT CTTGGAGAAG CAGAGCTCCC AGGGCAGTGG CTACTTGTCT
4501 TTAGTCAGAG CTCTAAGCTC CAAAATCTGG TGAAGCAGTG AAGGAGAAAC
4551 ATCCTAGGAA TTGTGGGAGG AAATATATCT TCTGTGTGGT CCTCTCTTTT
4601 CACAGTCTAG GACTCTCCTG AAGTACCTCT TCTGGGCTA CTGCCCCATT
4651 CAGCCCTTCA GAAACTGTGG GTATTACACT TCTGTCACCT CTATTACCCT
4701 AAGGCCTCTG CCTATTGAAC CCTCTTGCAA ATTGGTTATT CTGCTCTTTT
4751 TCCAGTTGGA TAGCTTTAAA AGGGAAGCA GAATGACTTT CCTCAGGATT
4801 TGTAGCTTAT GAGAAAGTAG ACTTCTTGG GTGGCCTAGA AGGTTGGAGA
4851 AGACAAACGG GAACTTCCTC TGAATGACTG AACATATCCA CAAATAATAA
4901 GCGTGGCAGG AGATGGTGTG AAGAGTAAAA GGAGCATATA GGAAGTTGTG
4951 TGTGTGGGGT GTCTGTTTCA AGAACCTGCT AATTATACCT TCAGTAAGAA
5001 ATGAAGCCAT ACAACCTCTA GAAGAGGAGG AGGAAGGAAC TCATGGAAAA
5051 GTGGGGAGCC ATAGAAGCTA GGGAGAGGTG TCCTAGGAGT GCTTCTGCCC
5101 AGGTCCAGCC ATGAGACAGA GCTCAAAAAG AGCTGGGCAC TGCTGGTGAC
5151 AGAACTGAGT GACCCGGGGG ATCCTGCATC TGTCTTACT CAATCCCTTC
5201 TTAATAATGT GACTTGGGGC AGGTCATTTA TTGGTTCTGG AACTTAACTT
5251 TCTGATATGC AAATGGGAA TAACAATACT TTCCTTGCCCT GGAGGCAAGG
5301 TCAGTCCCTG TTGCAAGTTC TTCCAGCTCT AAGATTTTCT GAACCATAGA
5351 CATAAGCACT CAGTGTAGGT CATATTGCGA CTTGCCAAAA ATGGATCAGG
5401 GAATATTGTC TCCTGAAGGG AAATGGCCAT TGACAAATTG ATTTATTAGA
5451 GCTCTGTTTA GTCATTTTGC TGGGAAGGAT AATCATTGTG TAACGTAAGT
5501 AGTAAACCTG GCCTTCTGGA GAATACTATC CATTTATATG TACTCTGGGG
5551 AGAGTGTTTA TACATACAAA TGAAGGACAG GGCTTCACTG GGAAAAACAA
5601 CTCCATGGAA TTTACATGA TTATCGCGAT GTCAGTGTGG AAGAAGATAT
5651 GGTAAGGCAT TAAATGACAT TAAGACCACA AAATTTGCCA TAATTTGACG
5701 CAGTTGTGGT TCTCTGATT CAGAACCCTT TCTACCCATG TCACGGATAG
5751 GTAGTTTTTC AGAGATCAGA GGCTTAGTTC ATTCTATTAA TTTCCTCATT
5801 CTATTAATAA TCAATTATGC ACCTAGGGTC TCTGAATACG ACTAAACCTT
5851 CCTCAAACTT ATTTGCATTT TCAGTTTGTA TAATATCTTG GTGCAATGA
5901 GGCTCGCAAA TGATCACTTC TGGGTAATAC TCATTCTAAA GGTATGTCAA
5951 CCTTGAGAA TCTGGTCTAG ATATTCTAGG GTTTGGTGAA CAAATCTATG
6001 TTCCCATCCA TCCCTTTTCA TTTATTTTTT AGACTTCATT CATTGCAGAA
6051 TAATGAGTCC AAAACCTGCT CATCTGTTCT CACGTGGCAC CCCTATTCTT
6101 GATATTTTAA ATTGCAATT TACAACAGA GGCAGTATTA CGGAGCAGAA
6151 AAATCGTGGG TTCTAAGTAC TCTGGGTTAG GATTCTGGCT CCACTACTGA
6201 TTTAATAATG TAGTTTGGGG AAATTTTATT AACCTATGAA ATTATTTCTT
6251 CATTGGCAAA ATGGGGATAA TAATATCTCT CTGACGGGC CATTATGACG
6301 ATTCAAGGTA TTGTATGCGG TGTACCTGGT ACACGGTATA TGCTCAGGAA
6351 ACAAGACTCT TCATAGTAAT ATTGACGAAT TAACAATATT CTTCAGAAGA
6401 CACTGTGGAG TTGTTTAGGT TACTTGGCTC TTTGTGTGAC CCTAAGTAAT
6451 GAGCATGCCA GTTTGGGGTT ACTATGAAGA GTACTTACCT AAACCTATAA
6501 AATATTAGAG CTAGAAAGGA CCTTAGAATA TCTTCTGCAG TCATGGTTCT
6551 TAAATTTTAA TGTGTGCTC AATCATCCAG GGATCTCACT GAAGGGCAGA
6601 TTAGGATCCA GGAGGTCTAG GGGAGGGATT GAGATCCGC ATTTCTAACA
6651 AGTTCTGGAT GCTGCGGGCC CCAACTTAGA GGTGAAAGGT TCTGAAGCTC
6701 TTGACCAAAC CAGGAGACCC AGCAAAGAA TGTTTTTCA GACAACTTGC
6751 TTAATTGAAT AATGATTGTT TGCTCTTTAA TTCCAACCTT CAATGCCAAT
6801 TTAGCAAGAA CCAGAGGCTG TGCTAATTGC CACACCAGTC TGGAAACCGA
6851 AATGGATAGC TTCAGGGTAC TTGGACAAAG TTGGAACATC TGCTTTCTAA
6901 TCTCTCCCTC TTTGTATAGC TTTATTTGCC TACCAAGCCT GGTAGTATTG
6951 AAAATCTGCC CTCACATATC TCCCTTAAT ATAATCAAGT TGAGGCCAGG
7001 CCTGTGCTCT ATCAATAATA TAGGATCCAC GAATTCACAT GTTTGGTTTT
7051 ATGCTTTACT TCTTCAAAGG TGCTTTTAGC AGCATGGAAG AATGGAAGAA

FIGURE 3, page 2 of 61

7101 CACGAGCTTT GGAATATGAA AGCAGATGTG AATCCATCAC TTACCAGTAA
7151 CTTTTAACAA GTCACATCAC TTTTCTGAGT ACCAGGTTTT TGTGGACAA
7201 CAGAAATAAT ATTCTCTATC CTTCAAGGGA ATACTAAATA TAAGTATGAG
7251 AAAAATGCAC AGTGCCTTCT CGTAGATGGT GTTCAGTCAT TCAACAAACA
7301 TTTGTTAGAT ATTTGCTATG TACTAGCTAC ATTACTAGGC ACTGGGGTTA
7351 AATAAGTGAA TAAGACAAGC TGACATTTCA GCGCTCAAGG ATCTTACTGT
7401 CAAGTGGAGA GGATCAAAGG GTACAGACAA ATCAAGGAAC GTGAGAGAAG
7451 TGGTATGGCT GAGATGGATT GAATAAAGGA GCAATGAGAG CTCCTTGCAA
7501 TGTGTGTGGT ACCACTGAGG ATTCTAAATT AACCTTCATT AAGGACTTAG
7551 TAGTGACAGA GGTGAAGTGG GGATAGGTAC ATGATTAATT TACATCCATA
7601 TTACAATGAA ACCTTAACAT TTAAGAGGGA TATTATTGAT GTCTTCATGA
7651 TCCAGAAGAA TCCTCACCTT TGCAACCATC ACTATAGTCA CTTCTTGAGA
7701 ATTATGGCCT TTAAGACTGT AGCATGCAAT GACAAAACCT CACAGAGGTA
7751 TGGGTCTGCG CCGCACACTA ATTTCACTCA TTAACAAGT GACTGGCTCC
7801 TATATCCCAG GCCTCAGCA CGCCTTTGCA AAATAACAGA TTATTGCAGC
7851 TCTTGGACCT TTGATGCCTC TGGGAATAGT CAAAGCCACA GATGTCAAAT
7901 ATGTAATGCG CAAGATCTAT TATAATTAAA TAGTGCAGGC CTCCTTCAAA
7951 GAAAAAAGC ATGTTGGCTG TGCTGCACGT TCTCCAACCA AATCAGAATG
8001 TTAAGCTCG AAGGTATCTG ACCTCCCAT TTTAAATTA TGAAGATGAA
8051 ATTCAGAAAC GGAAGGTAAC TTATCCAAGA TTACATGGCT AGCTATGATA
8101 GAAAGTTAGA GTTGGAAAGG ACGTTAGAAA GTGAGGGTTT GAAAGGACTT
8151 TAGAAGCTGC TTATCAATG TTCTCTCTGC CTTTCCCAT CTAGGCTTC
8201 TCCATTTTAC TTTTATCCAT CAATAAAATG TTAACCTCAA AAAGAATATG
8251 GCAATTCTTG GTTAAAGAT GCTCTGGAAG TGTGAGTCCG GGAGATTAT
8301 GTGACTAATG TCTTAACTAA GAATAATAAT ATATTATGGA CTAGTTTTAA
8351 TCTCTGTGTT CACCTTGAAC TGTTCAAGAA GGAATAAGC CCACGGAAT
8401 TTTTTAAAAA GTCTTCTCT ATCTGAATTG AGAAAAGGTG ACAGGCATAG
8451 TTGGAACATC TTTTAGGCAG TGCTGGTGAA CTTCAAGGCTA GGCCTTGTTC
8501 CATGAATAAA TAAAAATTTT CAAAATAATG CAGACCATTC CCTTCCAGGG
8551 ATGCTTCTCT TGTAATGTTT TAACCCCAAG AAATCTTTCT GTAAAAATCT
8601 ATAAAAATCT GGAGTGTTC AGGATACAAT TTGCACATTC TCCAATTTAA
8651 CTAAACACAT ATCGATTTTT TGTTTCTTT TCTTTTGGCT TAGCAAGGTT
8701 TTAAGATAGT CTCTTCTGG CCACAGAGGG AGATGATTG CCTCTAGAAT
8751 ACCCTTCTG TGCTTGAGAG AGTCACAAGA CTGCAAGCTC ATGGAGGATG
8801 AGAGTCAAGT AGAGGTGGTG ACATCTCTCC CTTGGCCAAC ATCCCTCTCT
8851 TTCTCTTTCC TTCTGCCTTC AGTGGCAGTA GCAAAAGTCC TCCTTCTCTT
8901 TAGGTAGACA GTCAGCCACT ACAACTGTGG CTTCTGAAA TCCTCAGTGG
8951 AGCTATGTAC TTGGCACAGA TTTGTCTTGA AGAAGGGACT CCATTTCTGA
9001 GCCAGTTGTT GAATGGGGAT ACTTAGCAGT ACAGTGAGGC ATTTCCAGTA
9051 GGAATTGTTCA ACCACAATTG CCCACTTTCC AGGCCCAAAG GAATAATTGA
9101 AGGCTATGTA GACTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTGAGATGG
9151 AGTCTCGCTC TGTCGCCCCAG GCTGGAGTGC AGTGGCACAT CTCGGCTCAC
9201 TGCAAGCTCT GCCTCCCGGG TTCACGCCAT TCTCCTGCCT CAGCCTCCCG
9251 AGTAGCTAGG CCTAATATAT ATATATTATA CATATATATT TATATTATATA
9301 TATATATATA CCACCACGTC CGGCTAATAT ATATTTATAC TTTTTTTTTT
9351 TAGTAGGAAA GGGGTTTCAC CATGTTAGCC AGTATGGTCT CGATCTCCTG
9401 ACCTCGTGAT CCACCAGCCT CAGCCTCCCA AAGTGCTGGG ATTACAGGCG
9451 TGAGCCACCT TGCCCGACCA TGCTATGTAA ACTTTTTAGC AGAAGCTTTA
9501 GCTATTGTGT CCCGAAGGGC CCCAGGTCAT GATGAAATGT CTTTTTTTTT
9551 TTTTGTCTCT TTTCTCTTA ATTACTGAGA CTGTCAAAGA ATATGTCAAA
9601 GCATGACATA TTCCAACCTC AGGATCCATA AAACACCCCA AGTTCTGTGG
9651 AGACCCTATC ACATCTGCAA AACTCTCCAG GAAGTCCAGA GCCCTCCTGG
9701 TTAATTTGTT TTAGGGACTA GGCATGCGGT ATCCCTGAC AACACTGGAT
9751 CAGCAATTCT CCTACCTAAG TCAGTCCAC ACCATGTGCA GCAGAGTATC
9801 CAGTGCCCTT GCCCTGGTCT GCTCACATTG GTTTGCTCTC CAGAATAATA
9851 ATTCTCTAAT ATCCACAAGA GATTGATTCC AGAACTACTC CGAGGATACC
9901 AAAAATCCTC AGATGCTCAA GTACCTGGTA TAAAATGGCA CAGTATTTGG
9951 CATATGACCT AGGCATATTC TCTCCCATAT ACTTTATTTA TTTATTATT
10001 TCGGGACAGA ATCTCATTCT GTCGCCCAGG CTGTCACTCG CTTATTGCAA
10051 CCTCTGCCTC CACAGTTCAA GCAATTCTCC TGCCTCAGCC TCCTAAGTAG
10101 CTGGGACTAC AGACGCATGT CACCACGCCT GGCTACTTTT TGTATTTTAA
10151 GTAGAGACAG AGTTTCACCA TGTGGCCAG GCTGGTCTCA AACACCTGAC
10201 CTAAGTGAT CCGCCACCT TGGCTCCCA AAAAGCTGGG ATTACAGGCG
10251 TGAGCTACCA CGTCCAGCCC CCCATATACT TTAATCATC TCTAGATTAC
10301 TTATAATACC TAATACAATG TAAATGTTAT ATAGTTGTTT TAATGTATTG
10351 CTTTTTTTAT TTGTATTGTT TTTTATTGCT GTATTATCCT TTTTATGTT
10401 TTATTTTTTC AAAATTTTTT TACCCGTGGC ACCCACAGTT GGTGTGGTGA
10451 ACCTGCGGTT GGTGGAGCCC ATGGATGTGA AGGGTGATA GTATGAGAAA
10501 ACTCAGAGGT GCAGAGTTGG AGAGCACATC GGGGAGAATG TCAGCATGGG
10551 TTAATAAAGA CACACTGTGG TTGGAGATGA TCACATGAAT GGCCACTTCA
10601 AAAATGAATG GGTCTCATCC TCAAAGCAGG CTCTCCTGGG CACTGCTTGG

FIGURE 3, page 3 of 61

10651 GAAGGTGCTA ATTGGAGCTT CAGGCAACAA TAATAAGGGG ATACAGGTGG
10701 GGATCCTGCC ATGGGCGTAG CTTACTTTCT CTGGACTCTT CTGGGTCTTA
10751 AGGCCAGTTT CCTCATCCAC TCAAAAGAAT GACAGCAAGG TGAGCAAAGC
10801 AAGGCAGGTA AATGAGGAGG ACTCTTTCTG GCTGTCCAAC TTTTCATCAA
10851 CTTCCCAAAG GTTTTTGGAT GGGACATGAG CACTCATTCC TTCTCCACCC
10901 TTTAGCTAGG CCCTGTCAAC TCCAGGAGGA AGGTAGAAGA GGTGAGAGCT
10951 GTGGTCTTTC ACTTATTCAA GATGTTTCCT TAGTGTTTTG TGTTGGGTT
11001 TTTTTTGTGTT TTTTTTTTTT GACAGAGTCT TGCTCTGTTG CCCAGGCTGG
11051 AGTGAAGTGA AGTGGCATAA TCTGAGCTCA CTGCAACCTC TGCTTTCGAG
11101 TTCAAGCGAT TCTCATGCCT CAGCCTCCTG CATAGCTGGG ACTACAGGCA
11151 TATGCTACCA TGCCTGGCTA ATTTTGTAT TTTTAGTAGA GACGGGGTTT
11201 TGCCATGTTG GCCAGGCTGA TCTCAAACCTC CTGACTTCAG GTGATCCAGC
11251 CACCTTGGCC TCCCAAAGTG CTGGGATTAC AGGTATGAAC CACTGCACCT
11301 GGCCCTTAT TGTTGGTTTT TAAAGAGAA ACTAAGCTGT GCTTCCAGAA
11351 CCCAGTTGA GAAAGTTGA AGACCTGGCA TAGAGCCAGT GACATATAAT
11401 TGTTAGTTGA AGAAAGAGAG CTCCTTGATC TGCAAATAGA GCACGGCCCC
11451 ATATTTAAAT TCTGCACATT CTAGAAGCAT TTTGCAAGAA TCAAATGCTT
11501 TGAGGATTTT GCTAAATAAC CATGGAGGAA AGCACTAGAC AAATATTTTC
11551 AGATGGCATG AGAGTTATCA TTCATAGGAA TTATATTTCC ACTCCTACCA
11601 CTTACTGGGG ACCCAAGTAA GAAATTAAGT GGATAAGCAG AGGAGAATTT
11651 AAAGTTGAAT GTGGTGAAC TTATTATGGA AAAAATATGT TTTTCTGAAA
11701 ACTGGATATG TGTATATATA TAAGTTCAGT TGTCATTTTG GAACCATCCT
11751 TACTCTTCCT ACCTAAGGAT TAGCATACAT AGGTGCAACT TGACTAACTC
11801 TGCTTCGACC CAATTCAGTT ACCTTTGGT GGGTAGGGTT CATGAAGAAG
11851 CAGTTATTTG TGGAGTGTAT AGAAACCACT CTATTGTAGG TTCTTTAGTT
11901 GGTACTTTCA AAATAAGTGA CATCCAAATA GTAACCTAAT ATTCCAAATA
11951 TGGCTGCAAA ACAAAATTGC GATTATGGAT GACTACTACT GCCATCTCTC
12001 CATACAGATC CATCTTCTGC CAGGCTGTTT GGTCTTGATT TGTCGACCTT
12051 TTAGGTTTCT CCCCATGTAT TCCACATGAC CTTACCAAC CCCACTTCTA
12101 TCTCCAAACG TCTTTCTGAG TTGTGGGGAT GCAGATGTAT TCTGCCACCA
12151 TCACAAGGGC TAACCGAGCC CTGGCTGCGG ATCTTCATTG TTGTTACAT
12201 TATTTCCATT CTTACACCTT ACTTCATGTT TGTACACTAT TTTCTTACAT
12251 TTGCTGTCTC TTCTAAACAT TCTTTGCTGC ATCCACTTTT TCTCTATTTG
12301 TGCTCTAGGT GCTGCAGAGG CTAATGCTGG GTTTCCTTTC ATTCTCCTT
12351 GCACTCAGCA CCTCCCTTCT CAATTCCTTT TGCCATGTCT CCACCTTAAA
12401 TCTTAACCTA CTTCCAGATAG TCTTTTCCTT CACACTATTG GCATCTGTGC
12451 TTGGGTGCTT TTCAGTCTAT TCTCTGATCT ATGATTTCTT TGCATGATCA
12501 AGAAGGTGCC ATGAAAGGAT CCCTTAAGAA AGCCTGTCTAT TTAGCCAGAA
12551 CGAAGTAGCT TCATGATAGC ACCAGGAAGA CTGATATCTC CCAGGAAACA
12601 AACCACTCAT GGTGTGCTC TTTTTCCTT CACTATGAAG TGTTGTCTG
12651 CCTGTATGTG AAAACGAGAG GGTTTAATTG TAAGGATGCA GCACAGATTG
12701 GGAAGTGCAT CAGAAAGCCA TTGGGGAGCT AGGTAGCTCT AGAGACCGCT
12751 TTCTGTCTCC AGTGCTCTCC CTCCTGGGTG ACATGTTTTT TGTCTCTG
12801 CATCTCTGCT TCTCTCTATG GGCTTCTTTA TTATTGTCAG CTGCAATGG
12851 TACCCCAAAG TCCTAGCTCA TGGCTCCTCT CTGCATATAT GCTTTCTGTT
12901 CCTACCACA AAGCTCTTTC TATCTTCTA GTTTAAATTT TCAAGAGAAG
12951 AAATCTGATT TTTTTTTAAC CTGGTCATGT CAAAGACCAC TGACCACATA
13001 TGAGCTGGTT GCCCTGTGTC AAGTGCCCCC TTCTCCACC CTCTCCCT
13051 CCCCATCTGG TCTGTCATAA CTGAATGATG GAGTGGGAAA TTGAAATTGC
13101 CATGGGAATT CCATGATAAG CTATCTAAAC AGTTTATCT ATAAAGTGTA
13151 GACAGAGTCA CTTAGAAGGG AGTCCCAGGT GAGACAGGCA CCTGTCAACT
13201 CCAAAGTGGC ACACATTCTA AGGTCTGCAA CACCCAGAG AGAGCACTGA
13251 TTTTGTAGTG GCCTGTACTG GGGCGGTAGG CTGGAGAATG GGAGAAATAG
13301 CCACTTCAGA ATCCCCAGC CCAATGCAT CAAGCTCACT ATAGACTCTG
13351 CAGCCACGAT TCAGCTGGCT TCTGCTCAGA TCAACAGAAA ACATTCTTAG
13401 TGAATGATGC TTGTGGCACA TATCTCAAGG CTACCAGGGT CATTCTTCC
13451 CATTACTTTT TTCTCTGATC TATCTCTCC AGGACACTAG CGTCAGAAGA
13501 TAATCTTCCG TCGTTTTCAG GTACACTATT TGGGTACTGA GTCACTTTCA
13551 AAGCCTCTTT CTGGGTTTGG ATTTCCAGAG CAGCCTGTGC TGTAAAGCAA
13601 GACAGAAGC TTCCCTGCCA TTCATGCCTG CCAGGGATAG AATGACAGTA
13651 CTCCTGAGGC TCTCCCTCCC CACCCCTCCC CTGCTGGACA GCTGATCTGC
13701 TGGACTCAGC CAGAGCCAGC AGGCACCCCC TCTTTATCCT AGGAGCTGCA
13751 AACTTGATGC CTTTCCAGGA AATCCCCAGA AGCTGGAGTA TCCTCATCTA
13801 CATGTGCGAC AGTGATGGT TGTGTCAAGT GCTCATGTCC CATGTCATAG
13851 GACTGGGGTG GAAAATAGGG ACCGTCCTTT TGTGTCAAGT CCAGTCAATG
13901 AGTAGTGGCC ATCCAGGGGG CCATCTTGGA AAGGACTTGT GAGGCTGTAT
13951 CTGCGCTCAG TTGTAGATGT GAGAAGAAAA GGCCAAATAT CTGCCAATCC
14001 TAGTCTGGG ATCTCAAGATA GAAAGAACTG CATGGAGTGA AGAACTAGG
14051 AGTCTCCATT TCACTGAGAT GCATAAGAAT GAAATTATTG TCACTATTTT
14101 TTCAATACTG GGCCAATCCT AATAAGAAAA CCCTTTTGA GTCTCTCTTT
14151 TCTTTATCCT ACATATAACA CAGAAGCTTT TTCTATTCCC TGGATGAACC

FIGURE 3, page 4 of 61

14201 CACAGGGACA GAAATTCTTG TTGGACAGGT GAAGCAGATA ATTTCTTTAT
14251 CAGACTAGAA TCTTCCAGAA GCACTGCTAA CCTAGTGAGT TTTGTA CTCT
14301 AGACAGGTGG TTCTCAAGCC AGCTCCCCAC CGCAGGCCTT TTTCATGGTC
14351 TGCCCCCTCCC TGTGGAACCC ATGTTTTAGG TTATTAGCTG ATAATTGGAT
14401 TTCTATTTTT TCTCATAAAA TACAGCAAAA GATAGCTAGT GATATTATGA
14451 TGAGTTAATG TAATTATAGC CAAAGCAGAG AGAAACAACA TTTTAATTAA
14501 CCTGTGTGGA CTGCTGGAAG AATATAAACT TTCTATTTTG GGGGTTGAGT
14551 AGAGACAGAA ATGAACACAG CCAAGGGCTG ACTGTCAGAG GACATTTAAC
14601 TGATGTAAAA TGCTTTGAAA TTATTGGGCA CTCAATTGTTT AAAGTTGTTT
14651 TTGATGATGG TAACTCCGTA AGGGGATCAG AACATGCTGG AAAGAATGGG
14701 CACAGCTTTG GTTACCTGGG CCTTACCCT GTTATTCAGG CCTCTGAGAA
14751 AGCTTACTAT TGTGTTATG TTTCTTACAT AATAAACTT CTAATATTTG
14801 TATGAAAACA TAGAATTCCA CTTTAAAGA TGTAAGGATT TTGTCATACC
14851 ATTAGGGTTA CTATGATCAC TTGATTCTAG GTCTAAGAAA TATTAAGTAA
14901 TTTACCCGCG AACACAGAGT TTTAAGGGTA AGTATCAAAA CCTTGATCTT
14951 CTAATACCCAT ATATTCTCAC TCATATGTGG GAGCTAAAAA TATTGAGCTC
15001 AAAAAGGTAG AGAGTAGAAT TGTAGTTATT AGAGGATGCG AAGGAGGATA
15051 GGGAGAGGTT GGTTAATGGA TACAATGTGA AGTTATGTAA GAGGAGTAAG
15101 TTCTAGTGTT TTGTAGCACT GTAGGGTGAA TATGGTTAAC AGTAATTTAG
15151 TGTATATTTA TAAAAAATA GACAGGATTC TGAATATTCA CAAAGAAATG
15201 ATAAATATTC AGCTGGGCGT GGTGTCTCAC GCCTATATTC CCAGCATTTT
15251 GGGAGGCCGA GGTGGATGGA TCACCTAAGG TCAGGAGTTT GAGATCAGCC
15301 TGGACAACAT GGTGAAAACC CGTCTCTACT ATAAATACAA AAAATTAGCT
15351 GGGCATGGTG AGGCACACCT GTAGTCCTAG CTACTTAAGA GGCTGAGGCA
15401 GGAGAATCGC TTGAACCTGG GAGGCAGAGG TTGCAGTGAG CCGAGATCAC
15451 GCCACTGCAC TCCAGCCTGG GTGACAGAGT GACACTCTGT CTCAAAAAAA
15501 AAAAAAATAA GAATGATAAA TATTTAAGGT GATAGATATG CTAATTACCC
15551 TGATTTGATC ATTACACTTT GTATACATGT GTCAAAATAT CACTCTGTAT
15601 CCATACATAT GTATAATTAT TATGTGTCAA CTAAAAATAA AAGGAAAAAA
15651 ATCATTTTCAG TGTATTTACA AAACATATGT AACCATTAG AATAATGTTT
15701 TAAATTATAT CTAAGGGTGT GATAAAATTA CAGTATAAGA TTGTGCTTGA
15751 AAAAGTGCAA TAAGAAAGTAA ATATGTACAG ATGAGAAAAA GTGCAAGAA
15801 CTAAGTCCTA AGCAGACTAT ACCTTTCCTA CTGCATGGTA CTTCTCTGGC
15851 CTTTTGCTTT GAAAGATTTT GCACCCAGCA TGGCAAGTGG TTAGCAGAGG
15901 CAGCCATTCT CACTTGTGCG TTGGCTTTGG GAGCCATATA TGTGTTTCAG
15951 CTGGGTGTGG AGTGGAAAGG CTGCATGTTG TATTAATGCA TTGTTAAGAA
16001 CCTCTAAGAG TGATTTCTTT TGGGAAGTGA GACTGACGGT CCGAATGGTG
16051 GAAAGACAAC TTTTAACTTT TTACTTTACA CTTTGTGCAC TTTTAAATGT
16101 TTAACATGAG CATGCATTTC TTTAATAATA AAAATACAAA AAAATTTTAG
16151 CCTAGATCT CTGTATTTTA AACTGCATAT TCTTTCTATT TGTTACATA
16201 TTTTAGCATG AGAATAAGGT TATGAAGCTG GAAGTAGCAG GCTCCCTTTT
16251 CCTCATATGT AGGAAGTTAA GAATGCATTC TACGTTTCTT CTTAAGGAG
16301 TTGGCTTCTT TCCTTTTAAC ATAGGGGTAA CTGGGCCAG GGAGTTTGGC
16351 AAGGGCTCAA AATAGTCCTT AATGCCAGC TCAGAAATCT GGATTACCA
16401 TCCTTGACTG CTGGCTCCAA CCCACCTCA CCTGAGCTGG TCTGCAGAGG
16451 ATTCTTGT TTGTCACTTC ATCACCAGCA ACTACCGACA GATGATGCTT
16501 TGGCCTGCTG CCTGGGTAAC AGGGCGAGGC TGGCTCAGGA CCATGTTTTC
16551 AGATCAGGGG AGCTCCTTTG ATGCCATGTC CATGGTGTC GAGGGCAGCC
16601 AGGATCAAGG GCTAGACGGG GCAGTGATGA GATGAGAGCA GGAGGGGCTC
16651 AGCTGCAGCC CCAGGAGAGC CTATGCCAGC CCTGTTGACC AAGGAGGACA
16701 GAAGCAACAG GAGAGCGGAG GCAGAGGGGT GAGTGTCTAT CGCTCAATGT
16751 ATAATCGGCA GACATTTGGG GAGCTCATAC TGTGGGCTAA GCACAGGGAA
16801 GAAAGGCACA GTCCCTGTCC TCAGGGAGGT CACAGTTGAT AGGGAAGACA
16851 AGCATATGTG CTAGCTGCTA TAGAAGGGGG AACCCTGAG GGCTGTGGCC
16901 ACACAGAGGC AACACCCCTT TCTTGTTTTT TTGTGAGGGA TTCAGTTTGG
16951 CGTCATTAGA AGTGACTTGC ACAACCCCTT CCTCCAGTCA ATTCAGAAGG
17001 ACTTGTTAAG CAGGAATGAT GAATTAGCTT CAGCTTGTGG GGCACACACA
17051 GATGGAAGTA TAAGGTGGCC TCAGGAGTAA GTAAATCCCC ATGCAAGCTG
17101 GTCCCTTAGA CCAGAGCAGC ACCCGGTTCT TCCCCATTTC TAGTAAAGGT
17151 GCCTCACACA CCACAGGAC ACAATTTATG CCTGCAGAAAT GAATGAATGA
17201 ATGAATGAGT GAATTCCTGG AACCTCTTCT GCTTATGTGC CACACCAGGT
17251 TGCAGCAAGC CCAGGGACAC CTGGGACTGG AATTGGGCTC TCAGGTGTAA
17301 GGACCAGGGA GCACCCACCA TTTTGCAATC TTCAGCCCTT CCTCCTCTCC
17351 TGTCCCAGCT TCAGCAATAT CCACAGAGCC CTCTGAGCAA CTCTGAGCCT
17401 CTCCACAGC TGACGCCTGC CTGGGCACCA GCTCTTCAGA GGGTGTCTTCT
17451 GTGCTGCTCA GCTACCTCTG AGCCTGGGCT GCCTTTGATG CTCAGGAGAC
17501 ACCCTGTAAT TCAATTAAGC CTTCTCTCCA GGGAGCATGT AATTATGTCC
17551 TATCTGGGCC TTGTAATGAC AGCCCTCTGC CACTCTACAG GGAGTTGCCC
17601 TGCTCAGCTG CCGAAGACCT TTCCCTGGGA GGAATACTAAT CTGCTTAGCC
17651 CAGATTGGAC GCAGTTCTGC ACAGCACTTT TCCGAATGCC TCTGAAATGA
17701 GTCTCACTG ACAGAACGGG CCCACTCTGG GGGAACTGAG GGCTCTCTTG

FIGURE 3, page 5 of 61

17751 GTCCTGCACT GCTCTTTGCC ATACAGATCT GTCTGCCCAG GATTTTTCTT
17801 GGGTGTGTAG GAGGCTGAGA GAGCTCCCCT TTCTTCTCAT GGCTAAATCC
17851 CTTGGTCTTT CCAGCCCTCC TGGGGGTTAG AAGGGAGAGG GAAAAAATAA
17901 AAGACTGAAC TTGTTGTGTG TGTTTTTGTT GTTGTGTGTG TTTGCCTGTT
17951 TTCTATGTTG TCTTGTGGGG AGAGGGTATA AGATTGATTG ACAGAGTGGC
18001 ACACTTCCCC TGCAAATTCA TCATTTGAAT TTCTCAGGTA AGATGTTTAC
18051 ATTTCTCTGT TAAGATGCTC CAATTCTCTT GGTTAAGATT TCCTGGTAA
18101 GATGCTCATG AATTGGTGGA GGTGTGGCG GGATGTGGGA AGTGTGCCTG
18151 CTCTTTCTGA GTTTTGGGGG AAGTGCCTT AATTCTCTGC ATGACTTTCT
18201 TTGCTCCTTT GGGCTTCATT TCTGTGCAAT GTAGTCTGAC ATGAATACTG
18251 CTCAGGAGG TGTTGCTTCC CACTGCCAC GCCACTGGAA ACCAGTAGCC
18301 CAGGTTTACT CGAGTCTCC TTTTGAGGAA CCCAAATTCT TTCATTTCTT
18351 TTATGTGAGA TCTGCCAAA ATGCCATTGG CAAGCTGTAC TGGGTGAAT
18401 AGTGTCTTC TCCTCCCAA ATGTATGTCT ACTCCAAACC ACAGGATACT
18451 ACCTTATTTT GGAATAGGGC TTTTGCAGGT GTAACCATTA ATAGTTATGA
18501 TGAGGTTATA CTAGATTAGA ATGGGCCCTA GATCCTATGA CTGGTATCCT
18551 TACAAGAAGG CCATGTGATG ACAAAGACAA AGAATGGAGT GAGGCACCCA
18601 AGGAACCTCA AGGATTGCTA GGAACACCA GAAGCTTGA GGAAGGCATG
18651 GAACAGATTG TCCTCTCGGA CCTCTAGAAG GAATCAGTCC TGCTGATACC
18701 TTGATTTTGG ACTTCTAGCC TCCAGACCTG TTGGGGAGAA TACATTTCTA
18751 CTGTTTTAAG CTACCACGTT TGTGGCGATT TGTACAGCA GCCATAGGAA
18801 ACTAATACAT ACAACCTGCA CAATGCCTAC TCCAGCATTC CATAGCAAGT
18851 CAAGGGCCTC ACAATTATGT CCAAAGGACT GATAGAAGAG CGACCTCTGT
18901 GCTACTTGTC CCTCAGGACG CTGACCCACA GCTCTCAAGG CAGGAGTAGG
18951 CCAGAGCTCA TTCAACAAC TGTATATATA GGGGTTCCTA TTGTAACCT
19001 TTTGAATTCC TGTTTGCAAG TAGATGAGGG TTGAAAAATA AATGGCCACT
19051 TTCTCTAAGC CATATACCCC AATCTGTTTT GTTACTTCAT TACAGCTGTT
19101 ATAATGGCTC CCTCTTCTAT CTTCCAATCT CCATAGCCCT GGTTCCTTGA
19151 TAGTTCTTTT TTTTTTTTTT TCTTTTTTTT AGGCGGAGTC TCGCACTGTC
19201 GCCTGGGCTG GAGTGCAGTG GCACGATCTC GGCTCACTGC CACCTCTGCC
19251 TCCCAGGTTT AAGCAAGTCT CCTGCCTCAG CCACCTGAGT AGCTGGGATT
19301 ACAGGACCTC GCCACCATGC CTGGCCAATT TTTTGTACTT TTAGCAGAGG
19351 TGGGGTTTCA CCATGTTGGC CAGGCTGGTC TTGAACTCCT GACCTCGTGA
19401 TCCACCACCC TCAGCTCTC AAAGTGCGGG GATTACAGGC ATGAGCTACC
19451 GCGCTGGCC AGATAGTTCT TAAACAACCTG CCCAGAAAGT CCAGCCTAGG
19501 CAGGGCAGC CATGAACCTGC ATTGCTCATT TCTGCTTTT GACCTTTTCG
19551 ATGGCTGAAC TCTAGGCCAT GGAACAACAG GACCCACTGT ATAGTTAAGA
19601 GTCATTTTGT GACTAGGGAG AAAAAAAGG GCCTATTCTC CAAATCCCTT
19651 TTCCCTCTGG AGTTCTCTCG TGCCTTAAAG CTTGTCTGA GCTACAGGTG
19701 TGTTTACTTG TTATCCCAA ATGCAGGCAT GTTACCTGCT TTCTCTGCA
19751 AAGAGAGGCA GGCCTGGCTG GGGCACAGCT GAAGATGTCA AGGCCAACCT
19801 AAGGGCAGCC AAGCTATGGC TGTCTGTGAC AAGAGGAGAG CAGCGGTGAT
19851 GGGAGGGTAG GAGGCATTGA GTTCATGTCC GGGTTTGCCT CCTACCCTCC
19901 TATCACTGCT TGATGATCCT ATCACTGTCT TGATGAGTTC AAGACAGAAG
19951 TTTGCCCTCAT CATTGCCACA ATAAATCAC CAATAACAGA AGTGTGAAAG
20001 CAGCGATGTG AGTGAAGCC CATATATACA CAGGGGGTAA TAGAGCAGCA
20051 TGATTAATAA TGTGGCCTTG TTATCAGACA GGCTGATTG GAGTCCCAGC
20101 TACTTGTGTT TCAAGTGAAC TAGAGGAAGT TATCTAACCT TTCATTTTAC
20151 TCATTTACAT AACATGGCTA ATAATAGCAC CTACCTTATA GGGTTATTGT
20201 GAGGATTGAA TACAATTATG CAATATAAAA CGTTTAGCAT AGTGCCTAGT
20251 CTAATTCCTC CACCAGGGGT ATGATGTACT AGTTTTAGT TAAGTAATTA
20301 GTATCTGGA CATGTCACAG CCATTTGACC TATCTGGGCC AGCGTTTTCG
20351 TCAGGTTCCC CCAGCAGTAA TTGTATTCCC TCCCCAATCC CGGGATTAGC
20401 TTTTAGGAAG AAACAGTTGA TCTAAAGATA GAAAGTCAGA GTACTGTCTG
20451 GAGGAAGGTA GAGGGAAATG TCATTATCTG GGTTCCTTTT GATGATGTCA
20501 GGGAACATGA CAGGCTGCTC CCAAAGACAG AGCAGCCCCA GGACAGGGAA
20551 GAAGGTGACC TTGAGGTTGA CTCCTCTGCA TCCCGATGTG GACGTTATGG
20601 ACTTGTTTTG GAGATGAAGG GAAAGAAAGA TGGAATGTAG AAAGTGAAGG
20651 AGAATAAAAG AAGTGGGAGG AAGAAGGGCT GGGAGGAGGA TGGGCAAAGT
20701 CTTTCTGTG TCAAGGATAA TTACATGTGA AATCACTTGC CAGTGGGACT
20751 CTGGGGCTGG AGCAGCTACA ATAATTACAG TACAGGCTGC AGAGGGCTCT
20801 TGGGCATGTC TTGGAGCAGC CTGTAGGCAG TACTGAGGCC TCTCTACTA
20851 GACCCATCTC CCAGATCACA TAGTACACAC ACCTTCCACC CCCGGGCTCTG
20901 TTAATGATCA AAAAGCTTAA ACAGAACAAT TACAGCTTCA GAGTGAAC
20951 ATATCTCTGG GCTCCTGTGA TGAAAACCAC AAGCCTGTCA GGCTGGGGCT
21001 GCTTCACATG GAGGGCCCTG CTCTTAATGG CCAAGTGATC TGGAGCAAGA
21051 CCCGTGACTC TCCCATAGTG CTGTGGATGG TGCTGCCTCT CCCACGCAT
21101 CCCAGAAGA GGAAGTTTCA TAACTAAGGA ATTAACATT TCCAGCCTG
21151 ATTCTGCTTT TCCCAATCAG GGCTTTATAC CTTTCTTTTT CATCCCTATA
21201 TTTGGAGATG AGTACCCTT GCCTTCATT TACCTAAGCA AGGCAGTTTC
21251 CTGTAACCTA ATGAAGTGCC AAACAATACT GTGATTTATT TAGTACTTAC

FIGURE 3, page 6 of 61

24851 ATCAGTCAGC CAAATGGAGC AGGACCCTGT GTTTGTAGC TGATACAACA
24901 GGGCAGCATC TCTAGTGAGG GGGCCAGGGC TTCTATTTC TTCATTAAAA
24951 AATGAAACAG CAGACCTGAT TCCATATTTA GAGATTACAC TTAGTTGCCA
25001 CTGTGGGTGT GCAGGCACCA ACCAAACCCA GTTGGCACCG TTGTCTTTTC
25051 TCTGCAATGA TGTATTGAAT TTAATAATGG AGGTATATGA AATTCAGAGT
25101 GATTGGAAC TGAAGTTTAG GGGCTTTGTG TAAAATTGAT ATGTAAGGGA
25151 TTTGGAAGTA GGTGAGGGAT TCTTCCCCAA TACTTATTCA ATTTTGGAGT
25201 CAAATAACCA AGCATTTACA AATAGCCAAA AAAGAAATTG AAAGAGGGTT
25251 TAATCCAATA AATTTTCATG CCTCATATGA ACCACATCTT ATAATAAGAA
25301 TTATGCTTTT TCATTTTATA CTCAGTTAAC AAATATGATT TGTGAGCACC
25351 TGGTAAGTTC AGGGCACTAG GCTGAAAGGG GTTACCAAAT GTCTTCATTT
25401 AACAAAGTCC AGCTGAGCTC TTACAGGTAC CAGAACTGTG CCTGGGCTGT
25451 CATATGAAGA TGAATGTAAG AGTGTGTCAG GCCTTCAAGA GCTTACAGTG
25501 TGTGAGGAGA CATCAAACAA GTGAGCCAAAT AAAATGATAC TGCCATTTTA
25551 GAAATAGCCT GAAATTCATG GAGTTCACAG TCTTGTTAGG AAAGTGAAC
25601 ATAAACCTAT AAGCATTTAA AAATAACTGT TGAAGACAGT AACGGAAGAA
25651 TGCAACTGGC AACTGAATGA TATAGGTTGT GATGACTGTT AAATATCATG
25701 AAAAGAGACC ATGATGAGCT GAGGCACTCC AAGAGACTTC TTTTGGAGA
25751 TATGTTTGA GCCAAATCTT GAAGATTAA TTGCTTTTTT CTTTTTTTTT
25801 TTTTAGTGT GAGTCTCGCT CTGTTGCCCA GGCTGGAAGT GCAGTGGCAT
25851 GATCTCTGCT CATTGCAACC TCTGCCTCCA GGTCAAGCG ATTCTCCTGC
25901 CTCGGCTCC TGAGTAGCTG GGATTACAGG CGTGTGCCAC CATACCCAGC
25951 TGATTTTGT ATTTCTAGTA GAGATGGGGT TTTGCCCTGT TGGCCAAGCT
26001 GGTCTCAAAC TCCTGACCTC AAGTGATCTA CTCGCCCTTG CCTTCCAAAG
26051 TGCTGGGATT ACAGGCATGA GCACTGTGCC TGGCCTTTTT TTTTTTTTTT
26101 TTAATAAAAA AAAAATAAAA AACAGGAAGT TTTTCGTTAGT TTTTTTGT
26151 GTTTTACTTC CCATAAAAA TCTTTGTGTC ACATGGAGGT GAATGGAAG
26201 AGAGGCTGTG CCAACAGACG GGAGACTTTT CTGATATCAG AACCCAGTCC
26251 CATAGACCAG AATGTATGCT TTCAATCCAC GTTGTCTGGG TCCATCCTAT
26301 TGAGTGCCCT GCGCCACAG CGGGGTATGG AGAAGAGTCA GACACAGCCC
26351 CAGTCTCAC GTAGCTCACA ATCCAGTGGA GGAGACGGAC TCAGAAACAG
26401 ATAGAGATGA AGCCATGAGA TCAGTACTGT CCGAGGCCAT GGCCACGGTT
26451 TTGTGGGAAC CCACGAGAGG GAATGACTAA CTGTGGGGAA GAAGAGGGAG
26501 AGGACCAAAA TGCAGGGGAA GTGCTCACAG AGGATAAGTA AGCAGTGAGG
26551 TGCCATGAAA TGAGTATACA CCTGACAGCC GTGTAACAGC TCAGAGCCTG
26601 GGATGAGGGG AATAGAGCTG CTGTTCTCTT GGGGGGAAGA GAGGGGTATG
26651 GGATTCTGGA ACAGAAGCAC CAAAACAGC AGGTATTGG AGCTGTTAGT
26701 GCTCAGATCA GCAATGGGTG CACAACCAAA CCATCTCCT AGGGATGAGT
26751 TCTTTCCTGT GGATGAGGGC TTCTCAGCCT GGCTTCTCCC GAGAATTACC
26801 CGGGAAGCTT GAAAGTACT GATGCCTGGA ACCTACCTCC AGAGAGTTGG
26851 ATTTCTATTG GTTGACGTGG GGCTGGGATA TCAGTATATT GTTTAAGCAC
26901 TCCAGGTGAT TCTGATACGT AGCTGTGATT GAGAACCCTT GCCCTAAGCT
26951 ATCCATCTG ACTCCAGGGG TGCTCCCAGG CCCATCTGTT TGTAAATGGA
27001 CAGGTGTCTT GAGTAAACAA ATGTGCCAAG GCTCTGGAGC CAAGCACGCC
27051 TGGCTCCTTA GTGCCACTT AGTGACCTCA GGCAAGTTAC TAAATGGCTT
27101 AAATTTTACA AATCCTTAAT TTGTAAAATG TGGGCAATGA TAGTACCTCC
27151 TCACAGGATT ATTACGAGGT TTACACGGAA TACTCTCAGC TCATAATAAG
27201 CACTTGACCA GGCCTCATGG GCTAGGCCCT CAAAACCTAA CGCATCTACA
27251 GGCAACAGCC ATATGAAAGG AATTTTATAC CACCAAGTCA AAAAATCTGT
27301 GAGCACTGCT CAGAAGCAAA AGCCTGTCTC CAACAGCGCT CATTTAAGGG
27351 GTGGGCGAGC TACAGAGAGA AGAATGAGCC CCCACAGGGT AAGCTGGGGA
27401 AAGCTGGGGA CAGAATGAGA CTCAGGAAAT CACTTGAATA TTGATTATAT
27451 TTGTGCTCAA TAATAAAATA ACGAAATGAG TACAGCCCTA GACCTAAACA
27501 TTGTGGGTGA GGCAAAGGCA ATGCGTTAAT TTTGCATCCA CTGAGGAAAA
27551 ACTCTAAAC GGTGACTTCT TTTTAAAGGG ACCAGAAGAA TCTAGATTAT
27601 ATTTAGTCTA AGTCAATACA TACGACAGAA CCTTGCCCTC TAGACTTGAT
27651 AAGAAAGAAG TAAAAAAGA GAAAGAATAA AAAACCCTTC CACCAAAATA
27701 CTAACATTCA GATAATGACT TTTTAGTTAG GTCTCCTGGA GAGGAGGTTC
27751 CCTCAGAAAT GAATAGATTT CTCTTCTAGT GCAATCATCA AAAGGTAATG
27801 CATGGACTTA AGTGTGATCC CCAAGAGAAA ATCAATGACC TTTCTGTGTT
27851 TGCCTTTGAG AAAATCAGCC AGTCTATGGT TAAATTAGAC ATATTTTTTC
27901 TCCTTGGTCA AGATTAGTGG GACCAAGAAT GCAGTCTTAC ACTCCTTCTA
27951 GCAAAGAATT ACCTGATGCC TTATTTCACA CAAATTTGCA AAGTTGTATG
28001 GACGTTGTAT CTTATTTTAA GGAGAACTGG TGATCAAATG ATGACTATTT
28051 CAATAGTGT TCAATTTACAC CACCACCCTC ACCCCACATC CTGCTTTCAC
28101 CTGAATCTGA ACGATCATAG TCAGTCTGAG ATTCTGAAGG TTTGAAATTC
28151 CTTTTCTGAG CTCTGCAAGA ACAGCATCTC CCAAGAGAGC TCAGGGCAGA
28201 CTGTCTGGGA GAGATTGGAA ACCTGTCTTT TGCAGTACA TGAATTGGTT
28251 GAATGGTCAC CTTCCATATC AGGCCTGCTT CTCCCATTTG GTTCTGATC
28301 AGCCCAACTT GGGTCTCACC CTTCTGATTT CTCTCTCTG GCTCACATGG
28351 GGCTGCACTG GCCATTAGGT GCCAGGCTTG GCTCCGTGGA ACCCATTTGGC

FIGURE 3, page 8 of 61

28401 CAGCTGGGCT CTGTGGAGCC CTAAGGCAGG GCTCTGGTCA CTGGTGAGAG
28451 GGAGGCCATT GGAGTCACTG GGGTGGACCT ACAGACCCTA GGGTTAACAG
28501 CTAGGTGGGT GTCCTCTTCA GAGAAACGGG TTACAAAGTG AAAGAAAGTT
28551 ACACTGTGAG GTCAGCCAGG GAGGAAGACA GAGAGCTGAT ATAAGATAGG
28601 TACTGATTCC CTGGGGATGT GAAAGGAGGG TAATATTCCCT AAAATGATAG
28651 CATTTAGCTT CCAGTATACA TTAATTGATT CCTGATATTC ATTA AAACTA
28701 AACGCTATTT CCTTGATGTC TCATCCAAAG CCGCACCCTT CTCCCACTA
28751 AGTCTGAGGG GAGCTTGTTT TGTTGACAAG TGTAAGAGGT TGAAGAGGGA
28801 CCCATGAACCT CTTTTGTCTT ACTGAAGAGA TCCACAGATG GAAACAAATG
28851 CTCCTACCAC ATTTATGAAC TGCTGCTTTG CAGTCCCGCT TCTGCTATCA
28901 TGCACAGGAA CTGACTAAGC TCCAAAGCCA GAGGATGTAA ATCTCCCTGT
28951 AATAAATGTA AGTCATTTAT TAGCTACATA CACTTCAGCA AGTCACCTAA
29001 CCTGCAAATT TCAAGCATGT GAATCTTGGA TCTTTCATGT GCTAGCTGTG
29051 AGACTTTGAG AAATGTATTT AATGTCTCTT TGCTTCCTTT TCTACCCACA
29101 CAATGGGTAT AATAATGCTT ACCATATATC TTTGCAGCAA GGTCTAAATG
29151 GGGTGATACA TGCTGAATAC ATTTCCAACA GAGTCTGTGC AATGATAAGC
29201 TCTTTCCAAA TGTTAGTTAA AGCTAACCAA CTAACCCACC AACAAACCAA
29251 CCTCTTAGCC AGGACTGATG GAAGGAGTCT GTGAGAGAAT GCATTTAAAA
29301 CACTTGGCAC CATGCCTGAC AAGAGTAAGT ACTCGATAAA TCAGTTATTG
29351 TTATTATCGC ATCGGTATTA TGACCATTAT CCTCTTCTCT ATAGGCTTCA
29401 GGTTCCTCTG TCTTTTATAT ACAGCAGTAT TCCAGCAGAA GCCTTTGATT
29451 TAACTAAGTC TCTACTGTGT GTGTGGCTAG ATGCTATAAA GCATCCAGAG
29501 AAGTGAGAAT TTGGTCCTGC TTTTAAGTAG CTTATAGTCT AATTAGGGGG
29551 AAGTAATCAG ATAGAAAGGA AACTAACAAAT ATGCAAAAGG AAACCTCATAG
29601 TTTGTGGTAA ATGCCAGGTG CTGCTGATAG TGGCTTCAGA GAGATCTCAT
29651 AGATGCTATA GGAGGTCAAA GGAGAAGCGT GCAGCTTGAG CTAAGTTTTC
29701 AGGGAAGAGG GTGAAAGAAT TAGTCATTAA TGTACACCTA CATTACCTGC
29751 CAGACTCCAT TCAGAAATAT TCTTACCAAA TCATCACAAT ACCTTGTTGG
29801 TAGGTACTAT TACTATTTTA CAGAGGAGGA AAGTGAGGCA AAGACACATT
29851 AAATAATTTT CCCAGAATCC CAAGGTGTGA GGTGGAGCAA GGACACAAAT
29901 CCATGGCTCT AAGTCCCTCC TAGTATATCC TGCAAAACA TCTGGAATTA
29951 ATGCAGAGAG GAAGGGGAGA GGCAGTGTTT TGCAGGAGTT CAGAGCCATG
30001 ATAACCCCTT TTGTGTGGCT TTTGGTAAGT TATTTTACCT CTTACCCCTCT
30051 GTTTCCCCAT CTGTTCAATG AAGGTGTGAT ATACACACAT TATATGGCCG
30101 CTGTAAGTGT GCAGTGATAT GATGCATGGG GACTCAGTTC ATGAGGCAGT
30151 GTGAATTCTG AAGGTATCAC AATGGGACAG GTGTTTTTTT CTCCACTCAT
30201 TTTCTCCGAA AGTCTTTTGT TTTGTGCCCC TCCCTCTTTG GGGCATATGC
30251 TTTCACTGTA TACCTTAATG ACATCAGAAT CTGCAATTTT CTGGCAACTT
30301 TTGTGGTTAA AATTATTTCT CCCTTCCATT TTAAAGCACT AATAGCAAAG
30351 GTATTAGGTG CAAATGATG ATAAAAATAA TTGCAATTTT TACCATTAAA
30401 AGTCATGGCA AAACCACAAT TACTTTGGCA CCAGCTGAAT ATTTTGAAAC
30451 TCCCTACTCT GATGTTAACC AAGTTCATGA TTCAAAGAAC TTGCAGAGGG
30501 GTAGGGGAAT TTCAAGGGAA AGGGGGAGAT GCCTGGGGTT GTCACACACT
30551 CTGTCCTTCA TCCTCTATTG ACATGTGGT TATTTGGAGA TGTATTTCAG
30601 TTCCACTATA GCCCCTCAGT CACTGTAGAC CCTCTCAAAG GGGCAATCAT
30651 GTTTCCTTAA GGTCAGGTCC ATTCATCTAA CCCCTCTCCC GGGGGCATCA
30701 CCTTGTTTGT TCCAGCAGCT GTCTGGCCAA ACTCACACCT CCTCTCACC
30751 CTTAGCCTCT TATGATCTGC TTTGGGGAGC CATGGGAACC CTTAGTTTCC
30801 TCTTTCATAC CCACTGAGAT TCACAAGTAA CTAAGGTCAA GCGGGGGCTT
30851 CATTGCCCTT CTGCAGATAC CTTACGCTAC TGTTCCTCCT CGCTGGCTG
30901 GCTCCACACT CCAGCAGACC TTCTGCTGGG CGAGAAGCTG CAGGCCTGAA
30951 TCTCTGTGTT CTCTATGGC CCCAACTCTT GGGATTACAC TAGCTCTTGT
31001 AAGAACTCAA TGCTCTGCTC TGCTCATTTT GATGCCATCA AAGAGGGCTT
31051 GCAAGTTACC AGCTGGGAGT GAACACCAGT GTCCTCTTTT TAGAGGTACC
31101 CCTAATCTTT CTGAACAATT TTGCTGGCAC CCCTTCACTT GGCTTTGCCG
31151 GGGTAAGAGG GGGCACTTCT CTCTTTTCCC TCATGAAAGG AGGGAGAGAA
31201 GCCAAAAATC TCCCTACTAG TCAACAACCT AGGCACCCCT CTTCTCTCC
31251 TCTATTTTAT AGACTGGGAA GGGAGTGATG GTTGTGGAG GTGGCAGAGC
31301 CAGTTCAGCT GCCTTTTGTG AAGTCCTGAA GGAGGTGTCT ATCCTCAACT
31351 GCTGGCTTCT GTCTTAAGC CTGGGGAGAA TTAAGTCCTC TTTGCCTCAG
31401 TTTGGCACTC CAATTGCCAA CATTGGGACA GCAGGAAAGT TTCCATCCAA
31451 CATCCCATTA AATATGTAAT GTGTATTAGC ACAGCGCCTG GCACTGGGCA
31501 GGTATTTTCT AAGTGATAGC CAATGCGAAG CCTACTTTAT TATTTTCTC
31551 TTTGCTTAAC CTACAAGGTG TCTAAGACCA TTTGTTTGTG CACACATAGT
31601 AAGATAAACA GCACTGAGAC TGTGGTCTTT TCTGCCCTGT GTCTTTATCC
31651 CACCTGGGAA TCTGGAAAGC CAAGCCTAGA CACACTCGTT CCACAAATGT
31701 TTAAGTGAAG TTGTCTTATT CAAAGCACTG TACAGCTACA AAGACCATCT
31751 TTTCTGAAT CCAAACCAGG CCACATGGTT GGAATAACTT CAAGTATGGA
31801 GACCAAGAGA AAAGGTGGTT GTTGTGAGCA AAGCTCTGAG TCCACACCTT
31851 CCAGGAACCT ATAGTTGATG CAATGGTGGG AGAAGTCTGA ACCTGGATTC
31901 AATCTGCTTG ATTCCGATGA ATGGTGCAGT AGGCAGAGCC ATGAGTTTCT

FIGURE 3, page 9 of 61

31951 AGCAGGAAGA AACCCTGGT TCAAAGAAGC ATCTGTCACA TCGAAGCTGC
32001 TTTATAGTCT GTTGGGAAGC ATGCATAATA ATTTATTCTT TCTTTCTTTC
32051 CTTTGGTCAA CAAAGATTTC TTGAGTCCCT ACTATGTGCC AGGTACTCTT
32101 CTAGGTACTG AAGATGCAGC AGTGAACAAA GAAGATACAA TCCCTGCCCA
32151 GCGGAGCTTA CATTCTAGTT ATCGAAAGTC CCTTCTCAG TGGCTGCTCT
32201 CTTTATTGTA GAAACCATGG GCTGTTCTCC TCCCATCCTA GGGCTGCTGG
32251 CTCCACAGAG GCACACAGTC CATCAGGATG CTCTGCCAGC CACCCACCCA
32301 CTCAAGACCA AGGGTTACGC TGTCAGTGTG AGCAGGGACA CTCCCGTCTC
32351 TGCTACCTCC TTTCTCCTGA AAACAAGATC TCAGGGAACA TCTGCCATCC
32401 ATTTTCCTC CCTGGGGAGT GACAGGAAAG GTGTATGGAG GAGATTGAGC
32451 GGAGTGATGG ATTGAGGCAC TGTGAAAGTG AATCATTGCC TGACATGGGA
32501 ATGAGGAGAC TTGCTTAAAG GACAAGCCAT GCTAAGTCAT CCATCGTTCT
32551 CCCCTAAGGA GGTGAATTGA AGTCCCATT TTTCCCAGGG AGCCAAATTA
32601 ACAAGGTGCT GGGAGATTTC CAAATTAGAA AAAAAAAAAA AAAAAAGCAC
32651 CACGAGCTCT CAAATCAGAG AGGCTGTTGA GTTGTTTTTT GGAGCAGATC
32701 ATTTGATTTG GCATCTAACC TTGAAATAGA GGAGAAAGCA TGGAAATTTCT
32751 GCTGAAAAC CATCCTTCTC TGAGCAGGTG GTACAAATAA GCATCGTTGT
32801 GTTCTCAGAG GCAGGAACCA CATTTGCACC TTGATACCAA CTACCTCAAT
32851 AACCACAGT CTGAATTTTC ACAAATTGCG AATTAGGAAA TTGTTGCTCA
32901 TTTTACAATT TGGTTTCCCT CAGGATTCCCT TTTAAGTAGC CAGCTACCCC
32951 AGTACTTTTG AAATATGACT TGCTTATAAA AATTGATAG GCTTGGCAGC
33001 GTGGCTCACA CCTGTAATCC CAGCACTTTG GGAGGCCGAT GTGGGGTGGGA
33051 TCACGAGGTC AGGAGTTCAA GACCAACATG GTGAAACCTT GTCCCTACTA
33101 AAAATACAAA AACTAGCCAG GCATGGTGGC ACATGCCCTGT AATTCCAGCT
33151 GCTCGGGAGG CCAGGCAGCT AGGCAGGAGA ATCACTTGAA CCCAGGAGAT
33201 GGAGGTGTCG GTGAGCCAAG ATCATGCCAC TGCACTCCAT CCTGGGTGAC
33251 AGAGCAAGAC TTCATCTCAA AAAAAAAAAA AAGATATATA AACAAGTTTT
33301 TATAATATTC CTAATATGAA CTAGTAGAAA AAAAGCATGT GTTTTTAGGT
33351 CTTAGAGGCC TGGTTCCCAG TTTTATCTCT GACTCTAATG AGGTATAGTA
33401 TTACCTACAT TGATTAGCCC TTCTATACCT CATAGGAGAT GCTCCAAGAC
33451 TGCTAGCTTT CTTCATTCAA TAAAGAGAGA TATAACAGGA TGGGCCTTAA
33501 AAGTAGCATG CATTTCTTCT TTCAATCACT CATTCAAAAT ATTTTCATGC
33551 GTGAAAATGC CAAGGATGTT TGGTCAACCA ACTCTTCCCA GACCCTGGCT
33601 GTGAGCCTGG CTTAGAACAA TTCCATTTTA ATGGTCCATG CCCTCAGGCA
33651 CTTGTATTCT AGTAGAAGAG CAAGGTAAGA AAACAGCTTA AAAAGTTAAA
33701 CAGTTTCTTC TTGAGATGGG TGTGTGTGAGA AAAATAAGCA GGATGCTTTG
33751 AACCTATGCA GGTAGGAAGG TCTGGAAAGG CCTCTCTGAT ATGGTGATGG
33801 TTAAAGCAAA ACCAAAAAGA CCAAGAACAC ATGGAACACA TGAAGGCTG
33851 GAAGAACAGT GTTTTATGGG GAAGGACTAG TACACACAAA GGCTGCAAAAG
33901 CGAGTGGGCT CATTTATGTT CTAGAACATG CCAAAAAGCG GGTGCAGCTG
33951 GAGAGGGAGT AAGATGGCAC AAAAGGTGAG TGAGGTGGAC AGGAGCCTTA
34001 TCACGAGGCT TTACACAGGC TCTCAGAAGC CCTGCGTGTG GGTTCCTTGG
34051 GACTACCGTA ACAAAGCTCC ACATACTGGG TGGCGTAAAA CAACAAAAAT
34101 GTATTGCCCT ACAGTTCTGG AGGCCAGAAT TCCAAAATCG GGTGCTGGCA
34151 GGGCTGCGCT CCCTCCAAAA CCTGTAGAGG AGAATCCTTC CTTGCCTGTC
34201 CCTAGCTTCC AGTGGGTTGC TAGCAATCCT GGGCTGGGTG ACTCCAGCTC
34251 TGCCTTGGTT GTCACAGGGC GTTGTCTTTG TGTGTCTCTG ACTTCACATA
34301 GCGCTTCTTC TCTTCTTTTT GTGTGTGTCT GTGTGTGTCC ACTCTGAGGC
34351 ACAGAAGTTT TTATTTATTT ATTTATTCAT TTATTTATTT CATTTGATAAA
34401 CATAATAGTT ATGCATAGTT TTGGGGTACA TGAGATATTG GATACATGTG
34451 TACAGTGTGT GATAATCAAA TCAGGGTGAT TGGAAATATCC ATTCACCTCC
34501 AAACATTTTC TCATTCTTTT GATTGGGGAC ATTATAATTC TTCTAGCTAT
34551 TTTGAAATAT ACAATAGATT ATTTGTTTACT ATAATTTCCC TGCTGTACTA
34601 TCGAATACTA GAACTTATTC CTTCTGTTGA GGGTGACTT TTGCACCCAT
34651 TAACCAACTT TTCTTTATGT CCTCCTTCCC ACTTCCCTTA CCAGCCTCTG
34701 GTAACCACCA ATCTACTCTC TACCACCATG AAATCAACTT TTTTTTTTAA
34751 TAGCTCTCAT ATATGAGTGA GACTATGCAG TGTTTGTCTT CTGTGCCTGG
34801 CTTATTTCAC TCAACATAAT GACCTCCAGT TCTGTCCATG CTGCTGCAAA
34851 TGACAGGATC TTATTTATTT TTTTATGGCT AAATGGTATT CCATTTTGTA
34901 TGATATACAT ATCTTCTTTA TCCATTATC CACTGATGCA TATTTAGGTT
34951 GATTCCATAT CTTGGCTATT GTGAATAGTG CTCCAATAAC CATGGAAGTG
35001 AAAATATCTC TTCAACATAC TGATTTCCCT TCTTTTGGAT ATATACCAG
35051 TGGTAGGATT GCTAGATCAT ATGGCAGTTC TAACTTTAGA TTTTAAAGGA
35101 ACTCCATCAT TTTTTCCTCA TGGTGGCTGT ATTACTTACA TTCCACCAA
35151 CAGCATATGG TCATCTCCTT TCTCCACATC CTTGCCAGAA TTTGTTATAT
35201 TTTGTCTTTT TGATAATAGC CATCTGACT GGGTAAGAT GATATATCAC
35251 TGATGTTTTT ATTTGCATTT CCCTTATAAT TAGTGATGTT GAGCATTTTT
35301 TATATACCT GTTGCCATT TATATGTCTT CTTTGTAGAA ATGTCTATTC
35351 AGGTCTTCTG CCCATTTTTA AGTGGATTAT TTGTTTTTTT GCTACTGAGT
35401 TCTTCGAGTT TCTTATATAT TCTGATACAC AGCCATCTTC TTATGAGGAC
35451 TCCAGTTATA TACGATTAGA GAGGTCCACC CTTTTTCAGA ATGAAATTAT

FIGURE 3, page 10 of 61

35501 AGCTTAACTA ATTACATCTG TAGTAACTCT ATTTCCAAGT AAGGTCACAT
35551 TCTGAGGTAC AAGGGTTTAG GACTTCAACA TATGAATTCC AGTGGGACAC
35601 AGCTCAACAC ATGACACCAT GGTAGGGAAC TTTATTCTAC TTGCAAGTTC
35651 TGAGTGTCTT ACGCAGGTAG ATGGACTGGT GTGATGTATG CTTTAAAGAC
35701 CGCTGTGTGA AGATGGCCTT AGGGTGATGA GGATGGAAGT TGGAGACTAA
35751 TAAAGGACTA AGAAAATGCT AAGAAAATCC AGGTGAGAGG TGATGATGGC
35801 AGAACTAAGG TGATAGCAGT AGAGAGAAGA GAAGTGGATG GAGATTAGAC
35851 ATCTTTTGCA GAACGAATGA CAAAATACCC CTATGGATTG GACATGGGAT
35901 GAGGAAAAGG AAGGACTTGA GGGTGGTGTC TAGGCTTTTT ACTTTAATCG
35951 TGAAGGGAAG CTGGTGCCAT TTACCTTGTT CGGACAAACC TGGAGAGGAT
36001 CAGGTTAGGG AACTGCGAGT GTATGGACGG CAAAGGAATG GGAAGAATGC
36051 AGGGATTAAA AATTGGAAAT CCCCTCCTCC AGTCAACAAT ATCTTACTTT
36101 TATCTGAAAA ATACTAAGTA AAAAAGCATC CTTTGTGTGG AAAGCTCAAT
36151 CCTTGTAAAA ATGAAGACAT CTCTGGGAGA GGAACATAG TGAGCACCTT
36201 TCCCAAAAGC AGCCACTGAT TTGGAGATGA GACAGAGTAG CATACAGGAC
36251 ATCAGAGAGA ACATGCTCAG GACAGAAAAG GCAATGTAGG ACAAGGCAGT
36301 GTCTTGCCAT CACAGTCTTT CCTCCGACTG GCTGTGAGCA AGTGCTCAAT
36351 TTAATTCAT CTCACTGCTG GGTGAGGACA AGTGCCCAA AGCAAAATGA
36401 CAAAAGTACC AGCATGATGG AGTTAGAAGG TAGCAAGTTC CCTCCACAGA
36451 GCCCAGCTGG AAGGGAAGAT AGAGGGGAAG TTGACCCCTG GGGATGGGGA
36501 ATAGGGTGAG AGGAGAACAT GAAACTGAGA AAAGGGCTTT GAGTGAATC
36551 TAGGCTAAAA GCTAAGGTTT CTTTAGAAAC CCACCATGA CCCAACATGA
36601 CCAGGGCTTT CTCTTGACTT GATTATTTTT GATACCCCAT CTTCTTCTGT
36651 ATTCCTGGAA TACAGTCTCC CAAGCCCCAG AATTGTGCTT CTATCAGAGC
36701 TGGGTTTTCA TCAGAGTCTC CCCTTTATCC TGTATCTCTG TTGCCCTATT
36751 TTGTTTGAAT TCCTGCCAGG TCAGCTGAAT TTGGGCATT GGGGTGAAAA
36801 ACCATCAAGT TGGGCATCCT GGCTTTGGCA CCTGGCACAG TGTGACCCCA
36851 CTGGTCTCTC CCTCACATTT GCTGTGGTCC GTGCACGGAA TTTGTCAAAA
36901 GACCTCTCTA GTATCAGCTT TCCTGCAGCC TCAATGCACC TTGTTCTGAA
36951 TAGGATATTA CCCCCAAGA GTATATTAGG GCATTTTCCT ATGCCAGAAG
37001 GGGTCCTTAG GCCTCTTGCA GTTTTTCTG GGTGACAGTG AAGGAGGAGG
37051 TGGCTGCGAG TCTTACTGCC TGTGGACTGA CCACCCAGG GCCTGGTGTC
37101 AGGACCATT GTCCAGCCTG TTGAGTGAAG GTCATTCTGC CTAAACTGTA
37151 AGCACAAAG AGAGTTCAGC ATCATTTGCA TCCTATTTTA TTGTCTTTCT
37201 TCTCTTTTCT TTCAAGGCCT CATTTTTTTT GGCTTGAACA AATGGTAAAG
37251 GCTGATTAT TACAGGTACC AAGCCAAACT TTCCTTGCTT TTGTGGCCAT
37301 CCTGTGGGG AAGGAAGTAC TCCTTTACTT TAAATAACTT TAAAAACATC
37351 TGTTTGGTCT CAGGGGCTGC AGCTGGAAAG ATTTTCTAAC TAATACTTGT
37401 TTTATGGGG TGTTTTTGGG GGGGTTTATT GAGTGTCAAA CCTGGCAGTA
37451 AATTAGAATC AGAAGACAAC AGTTAGTGAT AAGCAGAGAA GCCAAGGATG
37501 TTACCATAGG CAGGCAGCAG AGAGAGGGGA ATTGGTGGCT GGCCCCCAA
37551 AAACAGATTT GAAGATCTCC TTCTGTCATG TAGTGAATCC CCAAGTGCCT
37601 AGGGTGGGCT GTGATTACTT GAGCTCCTGT CTCCACTGTC TCAGCTCACT
37651 TGCCTTGGG TGACACACACA ACACACATTT GCTCATAGCA TCAGGTATTC
37701 AGGAGCAAAG AGCTGAATTT ATCTGGTTAA TTTAGATACC CCTACCCCTT
37751 CTTTTAACAC CAGATTGCCA GGATCATGAC CTCAAAGGC TACCCTGAAA
37801 TGCAATTGAC AAATGGGATG AAAGATTTCC CGTTTCATCC ACATTTGCCT
37851 CTTGAGCTAT TACAGCAGC AGGTCACCCG AGCCAGAGCC CACCTGCTTG
37901 CCCACCATGC CCGCACACAG ACAATGCTGC TTCTGTGGCT GGAGGTCGGA
37951 ACACCTCAGC ACTATCTCAG TTTGGCTGCA GATCCTCTGT GTGCTTGTA
38001 AACAGTTTC CTCACTGTGA AAATGAATTG GCTCTTCCAC AACTTTTTTA
38051 AAAGCACTAA CATATTAGGA CTCTCACTAA ATACTCAAAT GCTAAACTCA
38101 AATACTAAAA GAGTGCAAAG GGATGGGCTC CCAAATATTA CAGTGAAGGC
38151 TGCAGCATTT TCTGACCTTG CTGCTTTTTT TGGTGAGTGG CTTTATTTT
38201 TTAGTTTGGT TTCTTCTCTC CCATTCTAAT CAAGCAAGAA GTGACCACCA
38251 AAAGGGGCAC TCACCAAACC AGAACAAGCT AGTTCTTTCA TCTTTAATTC
38301 ATTGCAACCA AACAGATGCC ACAGAAAGAG CCAAGGGCTC CAGGCTTTAG
38351 CTCCAGCCTT GCCATTAACT ACATATGTAA GTCAGCCATG CTGGTCTGCA
38401 GGTCTTGTCT TTGCATGATC AAGGGACAAC TTGGAAGGTC TCCAATCACT
38451 CTATTCCTCC AGATGGAAAT GTATTCACCT ATTTCTTGA GATGCTCTGTC
38501 CTCCTCCAG TTAAGACAG ACCTTGACCC ACCTCCACTT CCTTCTCTGT
38551 GGCCCTGTCT TATCTGTCCT CTTGTCTTG CCTCTTCAAT TGTCTCTCA
38601 CCGTGTGTTT CACTTCTGAG CTATCACTGT GATCCCCCTG ATTGTTTTTC
38651 TAATGTCCCT CACTTCAAC CTGATTTTCA CGCATATACA ATGTCTTCCT
38701 AAACACTTAT AGACTCTGAC ACATTCTGTA ACTGACACAT TTCCCTTTAT
38751 CAAATGCAAT CTAAGAAGCT CACAGTTTCT CTAGTTTCA ACAAGAGAAA
38801 TCAGGAGCAC TTGAATTATA CAACTTGACA TTATTAGGGC TGATGTCTGA
38851 TTTTGTCTCT TCTGCCCTG TCATTTCTGT ACTACCTTTT ACAAACCTC
38901 TCCTATGACC TGTGTCCTCC TCCAGCTCCA TTTGAGAACA CCTGCTGTAT
38951 ACCCTGTGGG CTAGCTTTTA TTATGTTCCG CTCAATGATG AAGAAACAGG
39001 CTTGGAAGTT AAATATATCTA CCCCAGGCCC ACAGCCTEGA ACCTAGGATT

FIGURE 3, page 11 of 61

39051 CCAACCAAAC CTTGTCTGAT TCTAAAGCAT AGCAGAGGCT CCATACTCTG
39101 CCTCCCTCTT CTACATCATT TCAGTTTCTT CACTTTCCCA CCTCCAATTC
39151 TCACCCAAAC TGAATGTCTC ACAGTCTCTG TGCCCCCACT TTGCTCCATC
39201 CCTTGGCCTT CTGCAGTCCA AGCTCCATTC TGAGATCATC CAAGGCTTCT
39251 CTTCTGTGTT GATCCTTGGC CTTCTTGGAG TCTCTTTCTC CCATGTTCTC
39301 CACAACAGAG CATTCTCCTG ACTGTTTTCA TTCTGCATCT CACTCTTTCA
39351 TCAGTATCTT TTTCTCTACC ATGCCCCATA AATTGGGTG CTCCTGAGGG
39401 TCCTGTCCCT GTCCCTGCT TTCTTGTTGT ACAACCTCCT TGATCTACTT
39451 CATCTACTCA AGTTTGGTCC ACAATTTCTA TATTGTGAAG ATTCAAATCT
39501 GCATCTCTAG CCATATATCC ATTTGCCTGC TAGGCATTTT TACCTGAATA
39551 TTTTATAGGC ATGCCAGTGG CTCTTACTCT ATGGCTCTTA CTCTAAGTCT
39601 AGACTACAGC AGAAAGCAAT GCTCTTTTTA TTAAGGCATA GTGCCCTTTT
39651 CAGAATAATT TACAGCATAC AACCAGGCCT GCTGTGCAGC ATTACAATTT
39701 GTCATTAAAA CTCCATTCCCT CTTGCCAGAG TAAATGAGCC ATTACAGCC
39751 AGGGCGCCAA GATGGACTGT TGTATTTTTT TCTGCCTTTG TATTATGAGT
39801 ATTCATGGCT CTCCTCAGAC AAGCTCCTGG GGATTCCCAG TGGAGTTGCC
39851 TTAACATGCA GGTCAATTAG CCAGGCTCAA GGGTAGTTTC CTGGATATTG
39901 GTATCCCCCT TGCAGAGGAC TGCAGGAAAG CTGAACAGTG TTCCCCCAAT
39951 GTGGGTGGTG ATCTTGAGAA ATATCATTTG TATCTGCATG TGCTGTCTCA
40001 CACACACTAG CTCACATGTG CACACACAGC TGCATGCACA GGACAAAACC
40051 AAACACAGGG CAACCCAGCA TCTGCCCCC AGCCATCAGC ATTGTTACAC
40101 CTTTATAGGG GGCGGGAACA GGTGGGTGAG CAGGTGAACG TCAGGTGAGT
40151 TGAGAAAAGT TATTAATCTT TAAATCCTTA AGGAAAGTTA TTAAATCTCT
40201 TCTAAATGTC ATGCATAGGC GGGCTCAGTA ACTAACATGC AAATGTTTAG
40251 GGTCTGAAGC TCCTACCGAT AATCTTTCAG ATCTCAGAAT TCCAGCCCCCT
40301 TGTGCTGTTC TGGGTGTGCT GACACAGACG AAGCAGAGAA CAGTAGAATA
40351 AACAGCTCAG TAAACAATTC ATTGAGGGAA AGAGAGTGAG AAGATTCACT
40401 GGAGAGCTAG AGGAGGAAAT ACTGCTGGTG ACTATGGAAG AAATTTGCCC
40451 TAAGGCCTGC AGGCAATAGC TTGGTCTTAT TTATCCTGGT GTCCCACCCCT
40501 CTCCTCCAAC ACATACTGCC CTGGCAGGTA CGTAGAAGAT GCGTGAAAAT
40551 ATCTTTTGAA TTGAGCTATG CAAAAAATAC TGGATTCTGC CCTCCAAGAG
40601 TTTACTGTGT AGTTTCACAG AAAGCACATG CCTCCTTTC TCTGCCTCTT
40651 GAAGACTGAC CTATCTTTCA AGGCCACTGG CCCAATTCTG TTTTCTAAGT
40701 AAGACCCTG AGTCAGTGGT GACCTCTCCT TCTCCCTAAC AAAGTCTGAT
40751 TFACTTGAAT ATACAACAT CTCCCTCTTG GCCTGTGAAT TTCTTGTTGT
40801 AGGGAACATA TCTGATTTAT CCTTATCTCT TCCACAGTAC CTGGTGTAAG
40851 ATGCCCAATA AATGCATTGA AATATTCTAT AAGCTTACTA AATGCTCTGC
40901 CTTATGAGCC ATGAAATATA AAGTGCCTTA AACTTTGTTT TTCTCTTATG
40951 TAAAATAAGG ATAATAATAA TGACACCCCT ATAGGATTGC TGCAAGGATT
41001 AAGTGTGATA ATATATATAA AACTCTTAGC ACAAAACCTT GGCTCACAGG
41051 AATAGTAGCT ACTACCATAA TGGTAACTTC GAGGGCAAGT TTTCTCAGAG
41101 TTATTTAGCC CTCCTTCACC CTGTGTCCAG GAGTGCAGAT CAGAATGGTC
41151 AGATTCCAGG ACACCAAGTT TTCTGTGGGA GCTTCCCTAG GAATATAACT
41201 AAGGAATTAG AATCAGGTTT AGCTCATGCT GTTACACTCT CTTCCTCCAC
41251 TCAGGCATTG GGTGTGGCTT TTCCAAGCTT GAGAAGGGTG TGATCTGAGA
41301 TGGGCTTGGG TATAGAGGGG AATTATATTT AGGTCTACCC TGTATAGGAA
41351 AAAGTGCCTT CCCAAAGTCT CCCTGGCCTA AAGTATAAGA GATATGTGTT
41401 GGGATTAGTA CCCAGAGCCC AAGCCAATAA TGGGACCCCC TTCTCACATG
41451 TGGCTACCTC CTGCTATCAC CACAACAGCT ATCATACCCA TAACTACAAC
41501 AGAGGCCAAT TAACGTGGTG ATAATTGACA AATGTCAAGA CATCCTACAT
41551 TGAGGCACAC TGTGCGTTTT GCGTGAGCTT TTAATTTGGT AGGGAAGGAA
41601 AACTTTTATA CTTACACCTA TCATGGAAGG CAGAAGGTAA GAGCTAAAAT
41651 AAAGGTATGC CAAGAACAAG GGCAGGAAAG AAGGGTTTTA ACAACTTGAG
41701 GCCTGATCCA TTGATTAGTG AAGAGGAAAC ATGTTCAAAA ACCACTCTAT
41751 AACCACCTTC TCCAAGTTTT TTATAATTTT GCTTCTTCGG ATATCTTCTC
41801 ATCATAGTCT TAAATGCCAT CAAATTAAGT GAAAAATGCT AAAAATGCAG
41851 CCACTCTAAG AGAATGGGTT AGATGGGAGA TGGCTTTGTT AAAGAAGTCG
41901 GTCTTAAAGC AAAAGTAGGG CTTTGTCTAG GTAGTATGGA AGGAAGGACA
41951 TTTTGGGTCA AGAGAAGAAA GTGCAAGGCC TGTGAGGAA GGAATGAGTA
42001 GTAAAATATG CTAGAACAG GGTGCAGAGG GGAAGAAGTT CAGAGAATGA
42051 CCAAATAAAG AGGCTGAAAG GTGTAGACAT TATAGGCAAT AAAGCAACCA
42101 CAGAGGTTTC TAAGCCATAG GGTGACATGA TAGATCTGTA TTCTAGAAAA
42151 GTTAGTTTTG CAGCAGTTGT GTCCATTGAA AGGGACAGGA TAAGGGAGAT
42201 AGATAAGAAG ACATGCTATG ATGATAACTA GATTGGATA CCAAGTGGTA
42251 TGGTGGAAAG GAATGAGAGA ACAGGGTCAC AGATGAATGA CTGCCCAATT
42301 TCAATCCATC ATAACAGGAT GTATAGGATT GCCCTTAAGT AAGATGGGGA
42351 ATCCAAAAAC GAGGAACAAG TTTGTAAGGT TTTGGGGGCC AATGATGAAT
42401 TCCATTGGG ACATGTTGCT TTGGATATAC CAATGGGACA TTCAATGTGAA
42451 AATGATCTCG GCAATCCTAT CCTGGAATTC AGGATAGGAT CAGAATGAGG
42501 GACACAGTTT ATAAGGTAAA CAGAATGGAG GTGATATAGA AGATAAGGGC
42551 ATAGATGAGC TTACCAAAGG GGAGAGTTTA GAATGAAAAG AAAAGACCAA

FIGURE 3, page 12 of 61

42601 AGGCTAAGCC TGTGCTATTC TTTCTCCTCA CAATACGCTT CAGACCTGGG
42651 CACAAACCAT CAGTGAGTGT CATGATAACA CTACTGTGGG CAAATCCCCC
42701 CTCTATAAGG GCCTGATTTT CTCTCTATA AAATAGAGGG TTGAACAGGG
42751 TGGTCCATAT CCTGTTAATT GTGTTTGAG AGCACACAAC AAACCAGCTA
42801 CTATCCAAAG GGGACATCCC GAGGCAGGAC TAAGCAAAGG AAATCCAGCA
42851 CAGGGAAAAC ACTTTCTGGT GCTGGTCCCA GTTAGGCAGC GTTCAGTTTA
42901 ACCCATCACC ATCACCATCA GTAGCTTTCA GCTGCTACTG ACCACACTTA
42951 TAGGAAGAAA AACAATTAGA ATGGAGAGCT AACTCTTTGG AAATGGTCAA
43001 AGAACACGGG TCTACAAAAC CGTCAATAAA GCGCTAAGAT GCCTGGGCGG
43051 GGTCAAAAAG TCTACCTGGG CGGGGTCAAA AAGTCTACCT GCTCAGCATA
43101 TGGGGCCAG ACATCTGACC TTTACCAACT CCACAATAAC CACTTCATCT
43151 ATGGATCCAG TCTTGGTATC ACCTAGTCGC TGTTTTCAAG TAACAGAATA
43201 TTTGGTTCTC AATGGTAGGT GACTGGAATA CAGCTTACTT TCTCCCACCC
43251 CTACCGCCAA TCCTTTCTGC CCCCTTATAG TTTAATTTGC TTGTAAATTA
43301 CTTGGGAATA CATTTGGGAG CCATTATAGG GAAATAGAAG GCAGACATGA
43351 TGAACAGAAT GCAGGTGTT TTTTATTACT TCACATTGTG CTCAACAATT
43401 AGGAGGAATT CTAGAAGCCC CTCCCAGTGG CCAGGAATTG GTCATAGCAT
43451 GAATAAACTC AATATAGGTT GAGTATTCCT TACCCAAAAT GCTTGATACC
43501 AGAAGTGTTT TTGGATTTTG GATTTTTTTT TTGAATATTT GCATTATATA
43551 CTTACCAGTT CAGCATCCCT AATCCAAAAC TGAATCTAA ACTGCTCCAA
43601 TGAACATTTT CTTTGAGTGT CATATTGGCA CTCAAAAGGT TCCAATTTTG
43651 GAGCATTTTC AATTTTGGGT TTTGGGATTA GGGATACTCA ACCAGTGGTA
43701 GGTTTGGGAT GATATCAGCA TGCTAAGGTC AAAGAGACCT AGCTGGGAAG
43751 GGTGGGAGGA ACATGGAATT TTCATTCTCT GGGCACCCCT TGAACAGTCT
43801 TACTATTAGG GCCCCAAATT TGTCTAAGT GTGTGTGTGT GTGTGTGTGT
43851 GTGTGTGAGA GAGAGAGAGA GAGAGAGAGA GAATTTTCTT TCTTCCTTTA
43901 TATTCTAAGT TCCTCAGGAC AAAATTTTGG GTTCTTTTGT ATTCTCCCTG
43951 CAGCTCCTCA TGTAGTTCTA AGCAAATAAA GGAATTCATT AGGTCTTTGA
44001 TTTCAGAAGC CTCCCAGTTC TCTATGTAGG AGGAATCTTA GGGTGGCAAG
44051 ATAAGTTGAG GGACTTTTCT TCAAGCACAT TTCACAAGTA AGAGAAAATG
44101 TTGACTGTGT ATATCTAAGA ATGGGTGGGG CTCAATGATG CCCCCCTAAG
44151 TTACTCTTTA CTATTATTGA TTGATTGATT GATTGATTGA AGAAGCAATG
44201 TTTTGATTGA TTGAAGAAGT AATGTTTCCA ATGGCTACAG CAGACTGGAG
44251 CAAAAGAACA AAATGAAAGA AAATACATTA GGCTTTCCAT TTCTTCTAAT
44301 TCTGGGGCAT CTGATGAAGC TTTGGATCCC CCAAGGTAAG AGCTGGACTC
44351 TGCTGGTGAA AACTCTTTAG GAAAAACAAA AGAATATTGT CAGAATCTGA
44401 TGCACCTTAG AAATGATGCA GCAGAAGTGC TTTATTTTCT AAAAGGTGAA
44451 ATGGAGACCC AGAGAAGCAA AGTGATTGTG TCATGATCAT ACAGCTATTC
44501 AGTAAAGCCA GGACTTCTGT GATCCACTGT CCTTTCCTTA AACCAAGTGGT
44551 TCTCAACCTT GGGAGCTTTA AAAAAGTGT AGTGTGGAT CCATCTCAGA
44601 CTAATTAAT CAGAAGCCAT GGGGATGAGG CCCAGACATG AGTGGGTTTT
44651 TTGTTCTTTT TTAATAAAAA GCTCCCTAGG AGATTTCTCA AAGAACTGAA
44701 AATAGAATA CCATATGATC CAGCAATCCC ACTTTTGGGT ATCTACCCAA
44751 AGGAAGTAA ATTATTATAT AAAAAAGATA CCTGCACCTA AATATTTATT
44801 GCAACACTAT CCACAGTAGC AAAAATATGG AATCAACCTA ACTGTCCATC
44851 CATGGATGAC TGGATAAAGA AAATGTGTAT ATATACACAC ACAATGGAAT
44901 ACTATTCAAT CGTAAAAAAG AACAAAGTCT GTCTTTTGCA GCAATATGGA
44951 AGGAAGTGA AGCAATTCTC TTAAGTGAAG CAACTCAGAA ACAGAAAGGC
45001 AAATTCCACA TGTTCTCACT TACAATTGGG AGCTAAATAA TGCATATGCA
45051 TGGGCACAGA GTGTGGAATA ATAGACATTG GAGACTCGGA AGGGTGGGGG
45101 GAATGGGAGA GGGTCAATGA TGAAAAATTA CTTAATGAGT ACAACGTACA
45151 TTATTTGGGT GATGAATACA CTAAAAGCCC ACACTTTACC ACTATGCAAT
45201 ATGGCCATGT AACAAAATTG CCCTTACACC CCTTAAATTT ATACAAATAA
45251 AAATAAATAA ATAAAAGCTC CTTAGGGCTG AGAACTACTG CTCCTGTCCT
45301 ATGGGTCCCC AGCTTTATTT TAACTCAAAA TGAGTTTGA AAAATTTATG
45351 AACCCATTAA AAAATATTTA TTGAGTATCT CCTGTGTGCA AGGCACTGTG
45401 TTATGTTAAG TGGCTGAAGG GAAATTAGAC TGGGGAAAAA GACAAGGTCA
45451 TGGCCTAGGT TTCAAACTAA TATAAAGAC ATAACAAATA AGAAAGGATG
45501 CCACCTTCTT CCAACCTTCA TCCCTCTTCC TTTTGACAGT TGCAGATGTT
45551 GCTAATTCAT TTTGGCACCC TTTTCTCTG ACCCAAATAT AGTCTTATAA
45601 ACCCTTTTCA ACCTACGGCTC TAGGCAAGTA TCACCTTTTG CTCTTTTGGC
45651 ACCAGATCTC TTGAACACTA TTTACTGTTT TTGGAAGAT TATACATGTA
45701 TGTCTGGAGT TGAATGACTG AACAGAGCAA TAATAAGAGT TAAAGCAAGA
45751 AAGACAGGCC TACAGGAGAT GGCAGAGGGT CTTGCCTGTC AGGCATTGAT
45801 TTTGAACCTT ATGTCATAGG CAATCAAGAA CTATTGAAGT TTTTGCACAA
45851 AAGACTATAG ATGAGATTAA CCTGGTTACC GTAAAGGACA AAGTGATTGC
45901 AGGTAGAAAT AGGCCAGCTT CATAAATGAA TCATCAGGAT ATGAGAAGCA
45951 AGGGCTTGAA CATGAGAGGC CATAGTGGGA ATGGAGGGAA AGGGACAATG
46001 TGAGAAGCAG TGAAGGAGAA GGGCTGATTG AGTAAAGCAG TGGAGAAGAC
46051 AGTGAAGAT GTCAGATGAC TACCATGTTT GCGACTGAG TGAGGGAAGA
46101 GGTGGTGATG ATATTACTGA AGAGAGAGGC AAGGGGTGGT CACTGGATTT

FIGURE 3, page 13 of 61

46151 AGAGCAGACA TTATCAACTT GTGGTGTCCA GACATTTAC CCTGGGAGAA
46201 ACCTGTTCTG AAGTGGCTTC AGCATCTCTG AGGTCAGATT CCTAGTTCTA
46251 CTATTTTCTT ACTGACTGAA ATGGAAATCG AGTAGGCAAG GCTTTTGATT
46301 TGTCTCAGTG GTCTCTTCTG TAAATGGGG GTGTTTATAT CCATAGTCTT
46351 ATCACAGGGC TATTTGGGGG ATTAAGTAAG ACAAGTGTGG CAGAGCTTTG
46401 TAAACTGTAA TACACTGTGT ACAATTGGAT AATTATGGAT TCTTCTGACT
46451 CATCCACATG GATGTCTGCT GACCCTGGGG GACCGGAGCC TGGGAGGGAG
46501 GCCAGACCTG GAAATGGAAA CTTGAAAATG TTCTCTGTAG AAAAGATAAT
46551 TAACATTGTA GGATGGTTAA GTCCTCTTAA ATAGATGTCA GAAAAAATGG
46601 AGGTCATGTA GACAGAATGT TGGATAACAC TACTTTGTAA AATATTTTAT
46651 CTTATTTCCA TTATAAAAAGA AAAAAAGCTG GGCTGGGCAC GGTGGCTCAC
46701 GCCTGTAATC CCAGCACTTT GGGAGACTGA GGCGGGTGGA TTACCTGAGG
46751 TCGGGAGTTC AAGACCAGCC TGGCCAACGT GGTGAAACCC TGTCCTACT
46801 GAAAAATAGAA AAATTAGCCG GGTGTGGTGA CAGGTGCCTG TAATCCTAGC
46851 TACTCGGGAG GCTGAGGCCG GAGAATTGCT TGAACCCAGG AGGTGGAGGT
46901 TGCAGTGAGC CAAGATTGCA CCATTGCACT CCAGCCTGGG CGACAAGAGT
46951 GAAACTCCAT CTCAGAAAAA AAAAAAAT AGACAGGAAA ATAAAAAAG
47001 CCACCTCACA TAGTCTACTA CCACCAAAACA CATCATTAACT ATATATTTT
47051 TTTATTTCCA GCTCTTTGTT TTTAATATAA ACAATTACTT TTAAGGAAA
47101 ATGAGAAAAA GAGAGAGTGA TAAGACTTTA TTTTAAAGG TGGAAATATT
47151 CTAACCATGG AGAGTATTTA TAAATTTTTT TTTTGTAGA CAGAGTCTCG
47201 CTCTGTCAAC CAGGTTGGAG TGCAATGGCG TGATCTCAGC TCACTGCAAC
47251 CTCCACCTCC CGGGTTCAAG CAATCTCCT GCCTCAGCCT CCTGAGTAGC
47301 TGGGATTACA GGCACCCGCC ACCATGCCCT GCCAATTTT TTTTTTTTTT
47351 TTTTTTTGGA GATGGAGTCT TGCTGTGTCG CCCCAGGCTG GAGTGCAGTG
47401 GCATGATCTT GGCTCACTGC AAGCTCCGCC TCCTGGGTTT ACGCCATCT
47451 CCTGCCCTCAG CTTCCCAAGT AGCTGGGACT ACAGGCGCCC GCCACCGCAC
47501 CCAGCTTAAT TTTGTATTTT TAGTAGAGAC AGGGTTTCAT TATGTTGGCC
47551 AGGCTGGTCT TCAACTCCTG GCCTCAAGCA ATCCTCCTGC CTCAGCCTCC
47601 CAAAGTGCTG GAATTACAGG TGTGAGCCAC CGTGCCAGGC CCATAAAATA
47651 TTTTTTATAG ACAAGTGAGA GCAGAAATCA CAGGTTCTTA TGAGCAGGAA
47701 AATTTTGAAG GTCATCTACT CTGAACGTTT TTTTGTGTT TGTGTTGTTG
47751 TTGTTGTTTG TTTGTTTGTG CTTAGTTTAC ATTTATTAAA TACCCGTTAT
47801 GGTCCAGGCC CTTGGCTAAG CGCATCCAT GCAATATATC ACAAGATATG
47851 CCCAGCAATC CTAGGAGGTA GGGTTTATTA CTACCCATCG TACAGAGGAG
47901 GAAACTGAGT CATAGAGTTT TAGTGTCCTG ATCCTGGTCA CAGAGCCAGG
47951 AAGTGGCAGA GCAGGCCAGG CCAAGTCTGT CTGACATCAG AGCTCATCAG
48001 AGCCCTCCCC ATTTGTCCTG AACAGTAAAT GATGGAGTTC TTCTACAGGG
48051 TGGGTTGGGG GACAAGGACC CCATGGGTGT GTCTGAGTCA GAAACATCTG
48101 CGAGTGGGCT GAGAAATGAG TCTTCTGTGA AAAAGAGCAA AAGAAAAAAT
48151 GGGTCAGGAG CCAATAATCA TTGTCCATCT TTGTGTGAAT GTATGGTGTG
48201 GGAGTGGGAG CAATAAACGA TTCTAAGGTC ACACAGAAAA GATGCCACCT
48251 TCTCCAAATCA CATACCGCCC CTCGTCCCCC AGTTTCTCT GAAATAGCTC
48301 TTCTTTTGGC TTTATCTGG CTTCTTCACA CAGGGGTGTC CAGTCATCTC
48351 ATCCTGGTGG GACAGGGATA GAGCTGTGGC AGTGGAGATG AGGAAGCTCG
48401 CCTCCTAAGT GAGTCTGAAT TCTTAAATAT GGAGCCACTC CATAATCATT
48451 TGGAGTGAAT ATTGGGCCAT GGCCCTTTTT CTTGCCAGCT GAGCTATGAA
48501 AAAAGGATGT CTTAAGACCA GAGGTGTGG GACCATTCCC AGCCCTGCA
48551 GGAATCAAAG GAGCTGACAG AATTGTTTGT TTGTTTTTTT CACAAATTGA
48601 AAAAAAATAT GTAAATTTT TGAAAAGAAA GCCTCATTGA AAAGAAATCC
48651 CTCTCCCCAG CTGGGCTCCC AGGCAGCCTC CTGCAGAAAC TCCTTAGCAT
48701 TGCAGAGTTG TTCCCATGGC AACCAGATAA GGGGCTTTT GTTTTCCTTA
48751 GAAGATTGAA TCCTTTCAAC CAGAAGGTAA CCACTGGTTC TTCCCCACAA
48801 TCCACACTCC AAACCCCTTA CCCTATTTG ACTACATGAC TAGTTTTGCA
48851 TTTATGGATT TTTTATGCCC TAATTGAAAA AGGCTAAATA TACAGAAACT
48901 GAGGCTGAAG TGGTTTAAGG AGGCAACTGG CCCAGTGGT TCTCAGCAAC
48951 CACATGTCAA AGCTGTGGAC GTTAGACTTG ACGAGAGCAA GACATATCAG
49001 AATCTGTAGC AGGAGCATCT AGTCTCCAG TTCAATAGTG TCCACAAAAG
49051 AAATCCAGAG GTTTTTGAAG CAAGGAATTT GGGTGGCACT GCTGTGAGAA
49101 ACAATCACCT GGCTCCTCCA TGGGGCATAG AGTGAGATG CTCTTCAAA
49151 TACCCCTTCC TTTCCAAGGC CATGACTCAG AATGACTGGC GTAGGGAGCC
49201 TGGACCTGAT CTCTTCAAGG AAGGGGAATC AGATGAGCTG TTTAATCTCT
49251 CTTGTAAAAA GAGGGGTAT GAGACCATAG GCTCATTTTG GGGGGGTCT
49301 AAAATGCAGT ATTTTTGAA CTGATATGGG GAAAAAAGA CATTTCTGAA
49351 TTGTTGTGAT GTTGAGATT CTGGGCGGTT CCAGCATAAG CACCTTTCTT
49401 AGAGTACTTG GCTTTGTGAA GTAGTCTTA TCCCCTCCTT CCACTATTTT
49451 ACATCAAGTT AAAATAGAGG AAGATGCCTA GAAATGGCCG TATAGACAGA
49501 GAAAACTGCA CTAAAACTCC CTCGTCATG CTTGACTCCT CTCTAGACTA
49551 TGACCATCGA GGGGCCAGAA ATCATATCTT AAAGATCACT GTGCCTCCAG
49601 TACCCAGCAC GGTGTTTAAT AAATGTTTGT TGAATGAACG AACTAGTAAA
49651 ATTTTCAAAT CATTAGAGCT GAAGTATCCT TTAAGATTCT TTAGTCCCTC

FIGURE 3, page 14 of 61

49701 ATTTTACAGA TAAGGAAGCT AAGGCTCAAG ACATTGTGTG GCTTGGCCAA
49751 AGGCACACAG CAAGCTAAAG GCAGAGGGAG GACAGGACCC GGCTGTCTCA
49801 ACCCCCTGGC TGCTACACTT CCTGCAGCAT TTCTAATTCT TTTACCATTC
49851 TTGCGAGGGA TTTTACAGGC ATGTACTGCT AGAGCCGAAA TAATTAGAAG
49901 CCTCTTACTA CTCATCAGAA AAGCTATGTG AGCCCTTAGG GAGGACACAG
49951 CTAGCCTAGA CTCTGCCTCT TTGCCCTCTG CTGCTTATTA GCAGAAATGA
50001 AGTGGTGTG TATGATGATT AGTGTAAAGTA GGATGGGCAA ATGCACACCT
50051 TTCCCACCTT CAAACTCAGA AGTTGTAACC AAGAGTCACA CTGACTAAAC
50101 ACTCCAATTT CCCTTTCTGT TTTTCTTAAC ATATGTCCTA TTTTACCAAT
50151 AATAGCCATG GTATATTAGT CATGGTATTT CACGCTAGCT GCAGAAATAA
50201 CTTCCAAATC TCATTGGCTT ACTCAGTGAA AGTTTATTTC TTACTCATAT
50251 AAAGTTGAAT GTCCTGGTCA GGCAGTTATC TAAGCCACAA CTTGGGGATG
50301 GGGATGCAGG CAGCTTCCAT CGTATTGGCT CCACCATTCA GGGATGCGAG
50351 AGTTGCTCTG GCATAATCCA ACCAATAGAG GGGGGAGGTT TGGCACTTGT
50401 CAGTTAACCA CATTAGCCTAG CATTGACACA CACCACTTCT ACATACACTC
50451 CCCTAGTCAT CATTGAGTCA TGTGGCCCAA CCTAGATGCA AAGGCATCTG
50501 GGAAATGTAG CCCCTATCTG GTCAGCAACA ACTTGTCACT TGAAGGGGA
50551 GCCTGAATCG TTATTGGTCT CCAACACATG TAACTAGCAA TTATACAGAA
50601 CGTTATTTGT CAGGCAATGT GCCAAGAATT ATTTCAATTA ATCTTCACAA
50651 CAATCCTTAG AGGTATTGT CCTCTTAAAC GTATAGATGA AAAAGTTGAT
50701 GGTAGAGATA TAACTAACT AATGCAAAGT TGCATAAGTG GTTGGTAGCA
50751 AATCCAAAAT TCAGGCTGTT CTCTCCAGAG CTCAGGCTCA TGATTGCTGC
50801 ATCTCTACTG TTTGAGCTTC TGATCTGAGA AAATGCATCA GCCACTAAGT
50851 AGCCTGTGTA GTCTCCAGCA ATTACTTTCC TCCCTCTGGA TCTTGGTTTC
50901 ATTCTCTGCA AAGTGAGGAT GTTAACTGG ATAAAATCTG ATGTCACCTG
50951 CCAGCTGGGA CATCATATGA TTCTCAGGCT AAGCATATCA GGTGGGTGGG
51001 GTCCCCAGTG ATGCTTGACC ATAGCAAAGC CCTTCAAAG GTTCTTAGC
51051 ACACCAACATA AATGGAAGCC TCACAGTGTC CATGTAGGAG AAAGCAGGGC
51101 AAAGTATTTT CATTTACCCA ACAAGAAAT CAACATATAG TAAAAAGAGA
51151 GTGTTTTCCC ACCAAGGCCT CAGATTGACT AGCGGTAGCC TTGGAATAG
51201 GACTTTATTT TGTATAGTAC TTTTGCCACC AGGGTGGGGG GGAAGAGAT
51251 GCTTCTTTGC CCCAAATGCT GGTTCATAA AACCTAAAGA TGTACATGG
51301 AAACACACCA TTCCCCCAAT CCCCTCAAA AACTACTTG CACTTAAATG
51351 AAAGAGTAAA GCTGTAGGAC TTTACTGAGC AGTGTCTGT GGGGTCTTTG
51401 CACTGCCATG CTCTTGAGGG GCTCGAGGTG TATGAATTCC CCAGCATTAC
51451 TTCTCCTTAG AGGTTTCAGA TGAGCAGTAT GAGCTCCAAA CTCATGCTAG
51501 ACCCAAGTAT TTCATGAAAG AACAATCCTT GAATGACTTT ATACAGCAAA
51551 GCTATATTTT ACTGTGTCTT AGAAAACCAA TTGTGTGTGT TTGTGTGTGT
51601 GTGTACAAC TCTTGTTTTC TTTCTACCTA TGTCCCCCTG ATGCCTCCAC
51651 ACAGAACATC CCAAACTCCA TTTCAGGTTT CTCTTGAGAT TCCCAAATTT
51701 GGAAACAGGA GATGCTTCAA AGGCCTCTTG GAATGTCTTT TGAGGCTTTA
51751 TATTGTGATA TGTGGACAG ATGTTAAGA AACAGAAGAA GAGCATCACC
51801 AAAAGGATTT CTCATTTTAT GTGGAGATCT ATTAATATTT GCCACTAGCA
51851 AAGGCATTCT TCTTTGGGAA TGAATTATGC CCCTAGAATC AGATTGACCC
51901 CACAGAAACA AGGGAGAATA AATAGAGACT TGAGCTTAGA CCTTACAACA
51951 TGGCCAGAGC TGAAAAGGCT GAGCTCTAGG CAGAGAAGAT GCAAGAGCAG
52001 CTTCAGAAGA CCTGAGAGCT TATTTGGGTA GGTTCCTCTG GTGTAAGGG
52051 TTCTTGTCTA CGTTTCTTC CAGAATAAGA AAAGAACGCA AGGTGTGAGA
52101 GGGTGGATGG AAACAGGGTA TAAAGCAGGA GCATTTGGAA TCTGCCCTTT
52151 GTAGCCTGGC CCAGAGAGCG TCAGGCAGCT TGTGGGTAA TAAGTAACAC
52201 TGGCATTTTT CCCATGGTTC TGTCTCTTA AAGAGCAGGA TACATAAAGG
52251 GATTGAGATG TCTTGTGGT TTTGAGAAGC TTCTTTTAA TACCTTGT
52301 TAAAATTTAC CTGGAATTTA TTTTAATCAG GTGTGGTAAG ATGCACAGAC
52351 ATGGAGATGA CAGTCATGAA GGAAGAAGTA TTTATACTCA CAGATCCCTG
52401 TAAATAGGAA GCATGGCCTC CATGCAGGCC AATGGGGAAG CACCAGGGTC
52451 AGCCGCAAGG CAGAAGGAGC AAGAGGAAAA CATGGACAAG AGGCTCTACT
52501 GTGGATTTCAG TGGCAAAGAA TGGGAGGGGC AGAGTAAGCA GGTTTAGGAT
52551 TATCGGGTTT GAATGACTTG ATTGAGCTGT AGGGTGTAGA GACTGCCTCT
52601 ACTGTCTGGC ACCAGGGGTA ATTAGGGCAG CTGGATAGTG GTCTGGAGTG
52651 TGAGAGCTCC CTAAGGAGG TGGTTGGAGG TGTTAGGTTT GGATTGGTTG
52701 ATCTGTATAT GAAAGGTGCA CGTGCAGGTT GAGTCTCTA CTATCACTAG
52751 AAATTGGCTG GTCCAGGAG AAGTAGTCTC TCTAGAGACA GCAATGCCCC
52801 AGATGTCAAA GCATCAGAAA ATACAGAAAA AAAATTAAAA GCATGATTAA
52851 TTCATCTACA CAGGTCTAGT TTTTGTGTAG TTAAGAGCAA CCTAAAGAG
52901 TTGATAACTC GTGTTGCAGG TCAGGTTTCC CAGAAATCAT ATTCTCAGAT
52951 GAAGATTTGC ATGAAGGAGG TTTAATGCTC AACTAAGCC CTAAGGCTCC
53001 ATACCTGTGG AGGAAGTGAA AGAAGCCCAA CTGGGCACAG AAGGTGGAAC
53051 ACAATGCCAC TCACACAAAG ACCTCAGTGG ATCCTGGGCC ATGAGGAGCT
53101 CTAAGCACAG ATGACCCTTC AGAAATGTCT CCAAGTGGGG AAAGGAATCA
53151 TGCTAGTCAC TGGATGTGGG CTTCCCACTC CACCCCATGA GGGCATGACC
53201 TTAAGTGAGA GAGCTCTTTG GACACAGGGC ATCTAAGAG GGGCACTCAG

FIGURE 3, page 15 of 61

53251 CAGCCACATT GGGCACCAAG ACTCTCAGCA GCTAGAAGAA GAAGGTATAG
53301 TCCCAAAGGG GAATCTGGGC TGCACACCTT AGTATCCATT AGAACTGGAA
53351 GTAGGCTGAA TCCCAGGCAG GGATCCCCTG GAGAACACAG GTAATTTTTT
53401 AAAAAATCAA GCTATGTGTC TGAGGCTATG TGGTAAGACA TCTCAGTTTT
53451 CTGCTAGGAA AAGCCACCAA ACCAGATTGG CTTATTCATG TTGAAAAGTC
53501 TGAGAATCAC ACTCAGATGT TGTTGATAAT TCTGCTTGGG TAAAAATTTAT
53551 CTATTGGTAT GCTTGTGATA TAGCAGTACC ATTGCTAAAA ATTCCATGCG
53601 GAGAATCCAA TCTGCATCAT TTTCTTTCTC AATGATTTGT TTTTAAAGGC
53651 AGAGGTTCCG CTGTGCCCCC TTAAACCTTC TGTGCAAGTG CCAGCTTCCT
53701 TTCAAATGGA GAAGCAGCAG CCCTGTCAGA AAGGGTGGCT GGAGCTCCCC
53751 TTTTGTGAGA GGAGGAAAAC TTACTGGGAA TTACCTGTTT GAGAGCCACA
53801 CATGAAGGCA TACCACTGCT TCCTCTGACC TTCCAGCCGG TATATTAATG
53851 ACATACTGTT GTACCTGAGA ACCAATGATG AAGTGGGTGA TGTGCCTGGC
53901 ACCTTAAAGG CCTGGGCTTG CTTTGACAGG GGAGATGATA CACAACATGG
53951 CTGTTAGCCA GCTCTCACTG CATCTGGAAG CACCATGTTT CTTAGAGCCA
54001 AAGTTCTCAA ACTGTGCTTC CTGCTGGGCT CCACAGATCC TTCCCGTTCC
54051 ACCCTGCACA CAAACGTGCA CACACATACA CACACACACA CACACACACA
54101 CACACACAGT GTTCTCAATG CTCGCCATTT AGTTAGTATG CACCAAATAT
54151 TGGTAGTATC TGGTTCACC CCTGGCCTCT CAGACAATTA TTAGTATTTT
54201 TGGGAGCGGG GAGGAGAGTC AGGAAGACCC AAGCGCCATA TTTATTATTT
54251 CCCCAGCCAC CCCGGCCCAG GCTACATCCA AGTTCAAAGT CTATGACCCC
54301 CTCTCTGAGC TTTCAGCACT ACCTCCCTTT GTGGGGGAGG GGGGTGCCAA
54351 TTCTCTTTCT TCTCATCATC TCCTGTTGCA AAATAAAAGC CTAGGCATTC
54401 CTTTGAGAAA CTGGGCTTG GCATTGGAAG GCGTCTGACA AAGGCTTTGT
54451 TAAATGAGTG GAGGGAGGGA CGGTCTGGGA GATACTTTTT CAGGTGGCAT
54501 AGGACCTCCG CTTCTTCCCT TCTCACATGA GAAGGAAGAT TTTTCTAGAA
54551 ATCTACAGGT GTTTAAGCTG GAATGTGCCT CAGACATCAT CTGGTTGGAC
54601 CCTTTCAATT TGCAGATCTG AGGCCTAGAA AGATTGGTA ACTTGCCCCA
54651 GGTACAGTT GACAGAATTG CTCAGTGAAA AGTCCAGCAT AAATACCCCA
54701 GCCCATGTGG CCACCTGGCTG TGTGCTCAGC TAGTGAGGCA CACTTACTTC
54751 TTAATTTGTG CCACCCACTT TTCAGGCTCC CTTAGGACAG CCTCCACCTG
54801 CTCTACTGTG GCTTCCCATC GTCCCTCTCC TCAGGCACAG GCTGAGGAGT
54851 AATAAGAGCA CCTGATATGT GTCAGGCCTT ACTGTGTGCT AGGAATTGTG
54901 CTAAGTACTT CCTATGAATT TTCCATTTAT TCTTTATAAT AACTTTGTAA
54951 AGTTAGAGCC ATTATTCCAG AAGGGAAAAC CGAGGCAATG GGAGTCAAAG
55001 CAAAGAATTG GGGCTTTTAA CCATTACACT ATTTTGACACA AGTAGCCAGT
55051 AATGAAAAGG CTGCTATCCG GAATCATCTT TGCAAAAGGT AATTTCTTTA
55101 GCACTTTATC AGAAGAAGGG GGCTCCTTCC TCAAATTCTG AGGGAAGAGA
55151 AGTGGGGAAC AAAAGATGAC TGAATCCAAA GCTCGGGCAG GGAAGACACA
55201 TCGAGTGCCA AGTGCCTGCT GCTGGGGTCT AGTCTGACT CAGCCGCCAT
55251 CTTCCCAAGT GCTTCTGGA ATTCTCTCCT CTCGTGGGGC CTCAGCTCCT
55301 TCATCTTAGG AAAGAAGGGT AAAGATCTAC AGACAAATTG ATCTTTAAGT
55351 ATCCTTAGAG CACTACCATT TTCAGAATCT AGGATTCTAT ATCCTTCCAA
55401 TTATCTCTGT GTAGGGAATT ATTGGTCGTG TCTCTGATT AGGGAGCCGG
55451 ACACTCGTCT GTCAGCCCCA CCTGGCTCTG CAAAGTCCCT TGTGTATCTG
55501 CCCTGCCTGG TCACGGGAGA GGAAGAGACA AGGAAACACC ACCGCTCCGA
55551 CTCTGTGGAG CACGCGCTCT CTCCCACCCA CACACCCGCT CAGGAGAGGA
55601 GGAACTGCA CATTGAGTC TCCTCAGAGC CTCTGCAGC TCCAGCAGG
55651 GGTCTGGCTT TCCTCTCAGG TAGCACAGTC ATGCTGTAAA CTCATTTGGG
55701 TCTTGCTTGG TATGATAATG CGTTTAGTTG AAGGTTATA TAATTGCAGA
55751 GTCGATGATG ATCTCTAGGC CAATTTAAAG TCAAAGCTAT TTTAATGGA
55801 ATTGCCAGAG GAGGCGAGGG ATGGGGCAG GGAGGAGAGA TGGTTAGAGA
55851 GTGCTTTTGA AACCACCTC CAACAATTTT AGCCATTGCA TTTCCGAACC
55901 TGAATTTTCA GGGCAGAAAT TGGACAATGC CAATTAAATC AGAGCAGGTG
55951 TATGTGAGAG CTGGGTTTAC CTTCTGTCAG CTACAGTTT ATTTTGAATA
56001 CTGTTGCAGG TAGTGAAAT ATGACTAGGC TGAATAAGAG ATCTCAGTCT
56051 ATTCCCAGCT CAGCCAAAAG CCCTTAGTGT GTCCTTGATC AAGTTACTTC
56101 CCTATCCAT TTCTTACCT GCAAATGAGA AGCTTGAACC AACTATCCT
56151 AATGTCCCTT TCAACTCTAA AATCCTAGAT GATCCTCAGA TGTCACAGT
56201 GCTGAAGCCC AGCACTGTAA GATGTCAGGT GGTCCGAGA GGGTGAGGCT
56251 CTTCTGCTC AAATTATTTT TTCCACCCAA GACTCCTCAG TTACCTCTGT
56301 ACACAACCTT CGAGGCCCAT CTAAGTATCC AATAACCTGG GGCTTTAGTT
56351 TACAAATTTT CTTGGGGAAG AAGGTAAGG GGATCTAGCT TTCTGGGTTA
56401 TGAATGCCAT TAGGGAGGG CATGGTTTGA GTTAGTCCTG GTGCTGGGAG
56451 TTCATGAGAC TTATTCTCAA ATCTTCAGAG AAGAAAATTC CGTGAACACC
56501 TGGGAACATC AGGAAAAAAA AAATGTCCCC TAGGCTACTG TCAGGTTAGG
56551 CTGCTGGTTC TGATTGACC TTGAACCTGC TATAATTGAA CAAGATAAGC
56601 ATGTGACCTA ATGAATACT TTAACACTTG TAGCTTCCTT CAGCACAGAA
56651 GTGGCTCTCT GAACCAATTT TAAGCAATCC TGGCTCTATC TGTGCATGTT
56701 GATTTAGCCT GTGGTTATAG TGTTAACAAT TTAGTGATTC ACCTCATTTT
56751 TAATCTCTCT TTCCCTTTAG CAGGATCATT TTCTCTGTGT TAAGGGATCA

FIGURE 3, page 16 of 61

56801 ACATTGAGGT AAGAATGGCT AAATAATAGC ATCTTCTGGA ATACAAATGA
56851 CTTTATAAAT AAAAGAAGAT AAAAGGAAGA AGTAGGATGA TTTCTCAGCT
56901 CTAATACACT TAGCAAATGC CATATGCTTT CTCTGCGTG TACTGGTCAG
56951 GCCAGTTCTA GATACAATCA TGCGCTGCAT AATGATGTTT TGGTCAACAG
57001 TGGATTGCAT ATGTGACGGT AGTCCTTTAA GATTATAATA CCATATTTTT
57051 GCTGTGCCTT TTCTAGGTCT AGATATGTTT AGATACACAC ATACTTACCA
57101 TTGTGTTCCA ATTGCCTACA GTTTCAGTA CAGTAACCTG TTGTACAGGT
57151 TTGTAACCTA GGAGCAATAG GCTATACCAT ACAGCCTAGG TGTGTAGTAG
57201 GCTATACCAC TTAGGTCTGG GTAAGTACAC TCTATGATGT TTTACAGTG
57251 ATGAAACTTC CTAATGACAA ATTTCTCAGA ATGTATCCCA GTTGTTAAGT
57301 GAGGCATGAC AGTACTATAT CTCAAGACTG TCCCAAGCT GAAGTCTCCA
57351 GTGGACACAA AGACCAATGT ATTTAGTTGA ATCGTGGACC CCAAAAGTTC
57401 AAGTCCACCC AGAACCTCAG AATACAAGTT CAAGTCCACC CAGAACCTCA
57451 GAATACAAAT TTATTTAGAA ATAGGGTCTT TGCAAATGTA GTAAGTTAAG
57501 ATGAGGTCAA ACCAGAGTAA AGTGGGCCCT AAATCCAATA TGACTAGCAT
57551 CTTTGTAAAG AAAGGAAAAG GAACACAGAC AGGGGAGAAG GCCATGTGAG
57601 AACAGAGACA AAGACTGGAG TGAGGCATCT ACAAGACAGG GAACACCAAG
57651 GATTGCCAGG AGCCACCAGA AGCTAGGAAG AAGCAAGGAA GCATCCTCTT
57701 CTGGGGCCTT CAGAGACAGG ATGGCCCTGC TGACACCATT GTTCAAATG
57751 TTTAGCCTTC AAGACTGTGA GACAATAAAT GTATATTGTT TCAAACCATC
57801 CAGTTGGTGG TACTTTGTGA TAGGAACTA ATACATTGAG GATGGAGAGG
57851 TGTCTGGGAA GCCCATGAGA ACAAATGGAA AGAGCCAGAA GCCCTCAACC
57901 TTGGCTCGTC TACAGCCCAT TTTCTTCATT CCCGCATCCA GGCTTTGAGA
57951 TGACAGGAAG CTGTGAAACC TGTGAATTGT CTCCACCAGA AATCCTGCTC
58001 CCTGGTCCCA CCTAGACTGT CAGGGTTGTG TGGCAAGGCT TTCATGCCTC
58051 TCACTGACTG CCTAGTACGT CCCCTCAATG ACTGGTCCAC ATCTTTCTCA
58101 CCTTTCTCAT GCATGGCCCC AGATCCACCC CAGTGCCTCG TCCTCAAGAG
58151 GTGATTTATT CCGAGACACT GATGAGAGCA CTGTCTTCC TGTGTCTGAG
58201 GGAAGGCATG TAACTCTTGC TTATCTTCAC CTGTGCTCTA GATCCTGACC
58251 TTCTCTGGCA ACCTCAGGGA CCTTGCACCA TCCATTCTTC TCGCCTAATG
58301 GCGAGACTCA GTCTCTCCCT CTCCCTTTCC ACTCTCCCTT GCCATTCTTA
58351 GTATCTTTCT ACAAGCAGGT CTTCCAAAGT ACTGCTTGAG GTCTGAGTTG
58401 GAGGGAACAT GCCTCTACCC TACTAAAAAG AGAAATTCCT CTGCAGAAGA
58451 CCCAAGCTGA CTGACAAATC CCTTTACTGC AACTGCAGCT CTAGCTCCCA
58501 CCATTTTCTT GCTACTTACT TCCTGCTCAG GTTCCCTGGC ATTGCTGATG
58551 TCTTTTCAAG TTTGTGCCCT GGCCCTTTTC CTCCTCTCCC CTCACTTAGC
58601 ACTACCTGTC AAAATCAGGG ACTTACTTTA AAATTTATCC CAAATTATCA
58651 TTGCCATCAT CTCCACTGTC ACCTTATCAT ATGTTTGAAT AGCGTTTCCA
58701 TTTCCCAATG GTTTTCGCAT GCACTTTCTC AATTGAGCCT TACGAATCCT
58751 AGAGCTGAGA AGGGTAACAA TTTATGAGTC CTTTGACAAA TGTGGAACAT
58801 GACATCACAG AAAGTAAGTT GCCAGCCGAT ATGTCACTGT CTTCAAACCTC
58851 TTCTTTGTAT TTTTATTATC TCCCATTATA TTCTGCCTCT TGTAAATGATT
58901 ATTTCTACAT TGGTCATATC TTTCTTCTG TACTGATCTT CGCTTATGAT
58951 AACAAATAT AATAGTTTAC CTTTGCATCA CACTTGATG TTTACAAAT
59001 GCTTCAAATT CAACATGGCC CTTGATCCTG AAGATATTTA TCACTTAAGA
59051 ATCATTATCG CCATTTTAAA ATACAAATTT ATTACTTGGG CTAAATTTTC
59101 TTATTATAGT TGGGATAGGC CTTTATCCAT AGGGTGAGTG CAGTATTTGT
59151 GGACTGTGCT GGCAGCTTAA ACATTTAGTA CTTGAAAAATC TGATGCATTG
59201 ATCATCAGAG AAATGCAAAAT CAAAACACTA ATGAGATATT ATTTACCCCC
59251 AGTTAAATAG GCTTTTAGCC AAAAGACAGG CAATAATGAA TGCTGACGAG
59301 GGTGTGAAGA AAACGGAGCT TTCATACACT GTTGGTGAGG ATGTAAATTA
59351 GTACAACAC CAGGGAACAC AGTTTGGAGG TTCCTCAAAA AACTAAAAAT
59401 TGAGCTACCG TGTGATCCAC CAATCCCACT GCTGGGTATG TACCCAAAAG
59451 AGAGGAAATC AGTATATGAA AGAGGTATCT GCAGCCGGGC GCGGTGGCTC
59501 ACGCCTGTAA TCCCAGCACT TTGGGAGGCC GAGGCAGGCA GATCATGAGG
59551 TCAGGAGATC GAGACCATCT TGGCTAACAC GGTAAAACCC CGTCTCTACT
59601 AAAAATACAA AAAATTAGCC AGGCGCGGTG GCGGGCACCT GTATTTCCAG
59651 CTACTCGGAA GGCTGAGGCA GGAGAATGGC ATGAACCTGG GAGGCGTAAC
59701 TTTCACTGAG CCGAGATAGC ACCACTGCAG TCTGGCCTGG GCGAAAGAGC
59751 TGAACTCTGT CTCAAAAAAA AAAAAAAGAG AAAGAAAGAG GTATCTGCAC
59801 TCTCATGTTT GCAGCAGCAC TGTTCACAAT AGCTAAGATT TGAAGCAAC
59851 CTAAGTCCCC ATCAACAGAT GAATGGATAA AGAAAATGTG GTACATATAT
59901 ACAATGGAGT ACTATTCAAT AAAAAAAG AATGAGATCC AGTCATTAGC
59951 AACAAATGG ATGGAATCTG AGATCATTGT GTTAAGTGAA ATAAGCCAGG
60001 CACAGAAAGA AAAACATCTT ATGTTCTTAC TTATTTGTGG GATCTAAAAA
60051 GCAAAACAGT TGAACCTATG GACATAGAGA GTAGAAGGAT GGTACCAGA
60101 GGCTGGGAAG GGTGTGGGG GGCTTAGGGG GAGGGTGGGA TGGTTAACTG
60151 GTACAAAAAC AGAAAGAATG AATAAGGCCT ACTATTTGAT AGCACATCAG
60201 GGTGACTATA GTAAATAATA ACGTAGCTGT ACATTTTAA AAAACTTGAG
60251 TATAACTAAA TTGTTTGCAA CTCAATGGAC AAATGCTTGA GGGGATGAAT
60301 ATGCCATTAT TCATGATGTG CTTATTTTAC ATTGCATGCC TCTGTCAAAA

FIGURE 3, page 17 of 61

60351 CATCATATGT ACCCAATAAA TATATACAAC TACTACATAC CCACAAAAAT
60401 TAAAAGTAAA AAAAAAATT AAGAAAATAA AAGAACAAAA GTAGATGTAT
60451 TCTACATGTC TCCATATTGT AAAACTAGAA CCAGTCAGTT AACTTTAGAG
60501 GAAGGGGATT GTGGACTTGA TATAAAGACA ACTTTATAAT ATGCAGAGCA
60551 GCCTAATCCT ACAATTGTCA AAAAGTATAG TGGATTCTTT ATTTATTTGT
60601 CCATGATATT ATAGAGGTCA TTTCTGCTTT AACAAAGTAGG TGGGAGATAG
60651 CTAGGTAGGA TATATTTTGT TCTTATTTT TATTTTAAAA TATGGGCTG
60701 TGGCTGGACA TGGTGGCTGA AACCTGTAAT CTCAGCACTT TGGGAGGCTG
60751 AGGCAGGCAG ATCACCTCAG GTTAGGACTT TTCGAGACCA GCTTGGCCAA
60801 TATGGTGAAA CCCCATCCCT ACCAAAAATA CAAAAATTAG CCAGTTGTGG
60851 TGGCATGCAC TGTAAGTCTCA GCTCCTTGGG AGGCTGAGGC AGGAGAATTG
60901 CTTGAACATA GGAGGTGGAG GTTGCACTGA ACTGAGATTA CGCCACTGCA
60951 CTCCAGACTG GGAACAGAG TGAGACTCTG TTTTATATAT ATATATATAT
61001 ACACACACGT ACATATACAT GTATATATAT ACACATTATT ATTGAAAGCA
61051 GCCAAAGAAA AATAACACAT TATATATAGA GAAAGAGCAA ATGATGAGTG
61101 ACTTTTATATG TATATATATG TGTGTGTGTA TATATATAAT GTGTATATAT
61151 ATACATATAT ATATATAGGT TAAGAACCCT CAGCACATGT ATACCTATGT
61201 AACAAACCTG CATGTTTCAGC ACATGTATCC CAGAACTTAA AGTGAAAAAA
61251 AAAAAAAGA ACCTTCTGCA TGCCAGTAAC TGTGCTAAGT GATTAGGATG
61301 CAATGGTAAT AAAAAAAG TCCCTCTCCT TAAAGAATT TCTATTTAGA
61351 AGGAAAAACT GGTAAATAAA AAATAAATAT ATAAATTACA ATTTGTGAAA
61401 AGTGCTACAC ATGAAAGAGT GCTGAGACAG ACATCAATGG ATAACTTTA
61451 GATTGAGAAG GGCTCTGACA AAGCAACATT TAAGGTGCAA CCTGAGAGAA
61501 TAGAAGTTAA ACAGGCAGAT ATTTGGTAAA GAGCAGTCTA GGCAGAGGGA
61551 ACATCATTTG CAAAGGCCCA GGGTAAAGAA GATCCTGGTA AGGAAATGAC
61601 AGTGGAGAA GGTTAGTGTA GCAGGACTGT GGCTAGGGCG GAGAGGCAGG
61651 GAAGTAGTTT AGAATTTCAA TGCAATAGGA AATATGGAAG ATTGAAGGCA
61701 GTTTTGCATG ATAAATAAAT ATGATTGCTA TTTTAAAGCT ACTTTATCTA
61751 AGGATGGAAG ATTTCTAAAT AAACCTGTGT ATACTTGGAC CACACCACCA
61801 TGAGCAGCAG CTGCTCTAAT TCAGAGCAGT CCTCCTGCCA AACGCTGTGT
61851 GAGACAAAGC TCTGATTCAT AAAGGGGCAT TTTTCTCTGG GAGAAAACCA
61901 GTGATCCATG TGTAAGAGTA CCTGAGTCTA AGGGGAGACG AAGCAGCAAA
61951 AGAAATTGGC TTGTGAGGAC AGGGACATTG TAAGAAATGAA AAGAGGAAGG
62001 GAGGTGCTGA GCCCTTTTTC TTTTCTCTTT TTCATTTTTC TTTTTTTTTT
62051 TTTTGTAGAC GGAGTCTTGC TTTGTGCGCC AGGCTGGAGT GCAGTGGCGT
62101 AATCTCAGCT CAGTGCAACC TCCGGCTCCC GGGTTAAAGC GATTCTCCTG
62151 CCTCAGCCTC CCAAGTAGCT GGGACTACAG GCCCTTTTTC TTAATCCACA
62201 ACCTTCAGTT GGATTTTGCA AATGAGTCTG TCTTCACTGT TTCCATTGAG
62251 TGGCTGGAGA CAACTTGGAA GAGAATCTCA GAAATAACTC TGGCTGCTCA
62301 TCCAGTTGTT TGTAATTTT TATTGAGACT CTACTGTGTG CCAGGCTGTA
62351 CCAGGCACCT AGATATGACA GTGAATGAGA TAGGCAACAT CTTTGCCATT
62401 GGAGAGCCTA CACTGAAGTG GACATGAGGG AGTTGAAAGC AACTCTTATA
62451 GGAAATCATG GTAAGACGT CCAAGAGAAG AAAGATGAAG GGCAAAACAA
62501 TGCACGGATG CCAACATCT ATCAGAGAGA AAGGAATTTT CAGACCTGAC
62551 CTGAATGATG AAAGGAGGTT TTTGGAAAGG AAAATAGAAG GGAAGGACAA
62601 GGGAAATTAT CTGGGCAGCA ATATTTATCT GCTGTGGTGC TTCACTCTCT
62651 CTCTAATCCT TTTCCACCCC AGCCCCAAAT TTGAAAGGAT TGCAGGGAGC
62701 TCTGCTGGA GTCATTTCTG GTATTAAAAA TGTACAGAAA GGAAGCTTT
62751 GGTTCGTAGT TTGCAGGCTT CCCTGTCTTT CATTCCTATT GTAGAAAGCA
62801 GCTTATATAA AAAGATGTGC TGTGTGGCCC TTTGAGCTGC TGTGATTGTG
62851 TTAGGACCCC ACTGGATGGT ATTCGCATGA ATTAATCTAC TGTAGCATCT
62901 CTACAAATCA AGAGGCTGGC TTCTGTTTGA AATGTCCCAA GGCTTTGTGC
62951 ACAGGGCAAG CTAAATGTCT CCCTACAGTG AGACTGAAAA TGCCCTGGGT
63001 GCCCTTGTCG ATAGGATCTG ATATATAGAT GCATGTCTAC AATGACACAG
63051 TGGCTGCTGG CAACATTTAT TACAATCTGA ATGTGAAATG GCTATTCTGT
63101 TCAAGGATTG TGATAAAAAG TATCAGCCAC AGTAGATGTA TAAGGAGCCT
63151 GGTTCCTACTG CAACTGACTA CAGTTATCTG ATTTTTTTTT TCTAGTTCAT
63201 TTTTAGTCTG TGGAGCAAAC AGAGATTTCC TCCCCAAATG ATGTCCTTC
63251 TCAGTCACCA GGGTGTGGTT ATTTGGTTTT ATGTAGAGGA GATAGAAACC
63301 AATCAGCTA AATCATATT TGTGAAATC AGAACCAAG GATCCCAAT
63351 CTGGCTCCAA TCTAACCTTC CAGCCTCAAC TCCTACCTGT TCTTTGTAC
63401 TCTTACCCCT CTAACCACT TGTGGGATCC TGAACCTGTA ACCTGTGCTC
63451 AGACTGGTGC TTTTGCACCT CTCTGATGGG AAAGATTTCT CTCATCTTTT
63501 ATGATTGATG TGAAGTTTCA ATGCTTCTGA AATTTTTTCC TGCTCTGCT
63551 GGAGAGCTTG TTTCTTCTG ATTCCCATAG GTCAGGCTCT GTGTTTGGCA
63601 TTGGGATACA AAGCCAAGTA ACATAGCATC CATATTCTCA AATCCTCACA
63651 ATTTGGTAGG AATATAGACA AGTAAATACA CCTGTGCAA CCTTTGTAA
63701 CAGAGGTATA AAAGGTATG AAATAAAGAA TTTAATCAA TCAAATTGAA
63751 TATGGGCTTC AACCTGAGA TCTTCTTCCA TGATGAGGTT CCCAGTTTAC
63801 TCTAGTGAGG TCATGATTCC ATACTGGCAC TCTTCTAGGC ACATAAGGCT
63851 CTATCTTATT ATTAATAAAA GATTATTACC ATTCTCACTG CAAGCAGCAG

FIGURE 3, page 18 of 61

67451 ATGGCCTAAG TGGTATTATT GTTGTFTTGT TTTATTCCAC TTGGTGTTC

67501 TTGAGCTTCT AACTTCTGTG AGCTTTTTTT TTCTCAGCGA ATTTGGAAAA

67551 ATTTAAGCCA ATTATTATAT AATTTTCTT CTCCATTCTT TCTACTCTCT

67601 TTGGAACCTC AGTTGTACAT AGGTTAGACT GCATGACGTT GTCCCATAGA

67651 TCACTAAGAC TCTGTTCAAT TTTCAATTTT TTTCTCTATG TTCTTCAGAT

67701 TGGACAATTT ATCTTGATCT CTATTAATGT TCACTTATCC TTTATTATGC

67751 CACCTTCAAT CTGATATTAA GGCCATTCAG ATCTAGAATT TCTATTAGGT

67801 TATTATTATAT AGTATTAATT TCTCTGCTAA GATTTTTTGT CTGTTTCATTC

67851 ATTATGACCA CAATATTAGG TTCTTAAACA TATTTTAATA GCTGCTTCA

67901 AGTCCTTGTC AGTTAATTCC ATCTGAGTCA TCTTGGGGTT ATTTTCTATT

67951 GAGTGATCTT TACCTTATCT GTCGGTCACA TTTTCTCTG TTTCTTCACA

68001 TGTCTAGTAA TTATTATTG TTTGCTGTAT ATTGAAATGA AATATTATAA

68051 ACAGTATCAA TTACATTATC TTCCTTTTAA GGGTATTGAG TTTTGTCTG

68101 GAAGTAGTTA AATTACTAGT AGAACTTTTT GTTCTGTGCA AACTTGATCT

68151 TATTCTTTGT TACAGTGAGC CTATTTTAGT TTTAAAGTTA GTCCTAGGGT

68201 ACAACTCTTG CTCTATTGTA TGGCTCTTAC TTCTATCACA TTTATTCTA

68251 TTGCCTGAGA TAGTCAATGA GTTCTCACCT GAGCAGGAAC TGCAACATTT

68301 CTTGACATGG TCTTACCTAT GTATTTCATCA TTCTCTCTC AGGCCTGTAA

68351 GAAGAGATCT CTGTTGGGTC CTGTGGAATC TTGCTTGCAC TTGGACAGCT

68401 CAGCCTTCAG CCAAAGACTT GCAGGAAAAC CCCATAGAAA CATCTGGGCC

68451 CTCTCAATAT TTGATGTTTA GGAAGCTAAA CGTCAAGTAT AGCCTCCTTT

68501 TCTAGGGACC CTATCTTGTG AATTTCACTC ACCTTAACAA CTCAGAACTC

68551 TTACTTCTCT CCTTCTCAGG GGAGCTAAAC TGCACTTTC TGTGGGCTCC

68601 ATCTTCTCTG TCCACAATAG GAAAGTATCT GCAGAGAAAA GGCTGGACAA

68651 TTGTGTAGTA ATTGCTTCAC GCATTTCCCT TCTCTCAAAG ATTGTAAGTT

68701 TGCCTGTTT GCTGTTCAAT ACCTGAAAAT GATTTCTACA AATTGTTTTT

68751 CCAGTTTTAT GATTGTTTTT AATGGGAGAT CATTTCTAGT ACCAGTTCTT

68801 CCATCATGGC CAGAGGTACA AGTTCAACTT GGATCATTTT AAAAATACAA

68851 ACTGGGGCAT GTCACTTCCT GCCCCAAACC CCTTGGTAGC TTTCCATTGC

68901 TCTTAGAATA ACTTGTGAT CTACAACATC TTCTTCAAGG CCCCGCATGA

68951 TACAAATTCT GGCTATTTCT CTAGTTTCTT ATTGCACCAC CTGTCCCTC

69001 ATCCACCTTG TTTTAGTCT TCTCTCTTTC TTTGAACCTC TACCACCAGG

69051 TTTTTTCACA CGTTCTTCTT TCCCCATTAA CAATGATCCA CCATTCTCTT

69101 TCTTTATCCA CTGTTACTCA TCCTCATAAC TGAACATCA TTTCTTAAGG

69151 ATGGCCATTC CTGGTTCAGT CAGTCTATAT TTCATCCCCC ATCACATACT

69201 CTTGTTTTAC CCTATATTTT TCCTTCAAAG CACTTATTTA AGTTGTAATT

69251 ATGTGTTGTT TATTTTATGT CTGTCTGCCC TCACAGAATC CACAGTCCAG

69301 GAGAACAGAA ATCCTGCCTC TTTTATTTAT ACCACATCCA CAGTATTATT

69351 AGTGCTGTGC ACCTAGTAGG TATGCAGTAT GTACCTATTG AATAAATGAA

69401 TTGACTTTAG TCTTTTAGAT CGTCTACTCA TTTTATCATT GATGACAAAC

69451 ATAATACCTT ACATTTCGTGT AGTCTTTTTC ACTCCTCAA GAGGATTTTC

69501 TGCATAGCTC CTCTGAGCCT CACAAAACCC TTTAAGGAAG ATTGTGAATA

69551 TTATCAGATA AAGATTGTGA GACACAGAAA AGCCAGATGA TTTGGCAATG

69601 CTCTAGTATC AAGAGGCAGA AATACAGCTA GAACAGTCTC CTGGCTCTA

69651 ATCAGGAGTT TTTCCAGAA CACTGCTTCA TCTTCCATTC TCTTGGGTTC

69701 TTTCTATCCT TACTTTATAG GGCAAAATGT GTGCAAAGTA TAATCCCTCT

69751 TTTGCAATGT GTTTTATAGT TTTTCAAGTT GAATCATGTA GGCTTTTTAT

69801 GCCCTTTAAT AATATCAGTG AGCACAAAGG AAGTCCGTG AGGGCTTATA

69851 ATCATTTTGC TCCCATTAAT TCCAACACTG AGCAGTTTCC CCATTTCCAT

69901 TCTTGGCCTT GTGAAGCTCT TTGCTATCCC TGTAAATATC TAAAGTTGCT

69951 TGAACCTTCT TATTGCAAAA ATGCATCTTA AACATTCTAA TACCTCTTTT

70001 TTAATAAACC AATAAAGACT ACGTCAAAAA TCAGCCATCA ATCGAGAAGC

70051 CCTGCAGTCA TTTGTGTGCT GTTGTCCCTA AGTAGAAGTG AATGTGCTGA

70101 GCTCTGCATT CCCACCTAG CTCCTCTGTG ATCAGGGTGG ACATTCCCAG

70151 GACAACCTGG CCGAGGCTGG AAACACCATC TGAATGTCTG ACCACACAAA

70201 GTTGAGTGGC TGATCCAGGT TTAACCTTGA CCTCATCAGC ACCACCTTCT

70251 AAGCAACACT TTGGCTCAGA AGCCCAGTTA TTTATTCCAA GGGATGATTG

70301 AATGCAGTGC TAGTGTCTTCT TCAGGGCTTT TGAACCTATT TATTTATCCA

70351 GTCATTTATA AAAGATGAAG AGGAGAACAA GGTAGGCCAA AGTGGCTTTG

70401 TACTATTAAA GGCTGCTTGA TTTCTAAGTA CATGTTCTTT GCCACCTTTC

70451 TGCCATTCCA CATCTAGAA GCCATGGGTA AGTCAGCACA GGGATCTTAA

70501 CATGATAACA TTGTTTTAG GAGGTCTCGT GCATAATGGA CCAGACTTAG

70551 AGCACAATGC TGTAAGGTAG TGATTTAGGT GAGCAGCAGA TTCTGGCTTT

70601 AGGAGTTTAT TATCAGATGC TTTTAAACG ACTTGTGGCC CAGGATCCCT

70651 GCACCCATGG GAAGCATTGT AGCCTTAGAA CTCTGGGAAT TCTGAATATA

70701 ATTCCTGAAT CAATCGTAAG GATGCATATC TGATGCTTAG TGCAAAACCA

70751 GAGGCAGAAT ATTTGCAGGC AGTGTATCCT TGAAAAACAA ATCTAGGTCA

70801 TTTTCTGCC ATGCTTCAAG CTTACTTTTC CATCCTTCTC GATGGTAGTA

70851 CTAACATACAT TTGTAGACCA TTTACGTGGT CAACACTGTG CTAAGCTGTT

70901 AGCTTCATTC TCTATGAGAC AGGCACTCTT AGCCCAACTT TACAATTGGG

70951 AAAACTGAGA CTCAATGAGA TAAAGTAAAT TCTTTACAGT CATTATGCTA

FIGURE 3, page 20 of 61

71001 GTCCATGAAG GAGCTGCGAT TTGCAACTAA ATCTATCTGA TTCCACAGTC
71051 TTTGCTTTTA ACCAGAGGTT AGCAAACTAC TTCTGTAAAG GGAAGACAGT
71101 AGTTATCTTA ATCTTTGTGG GCAACATAGG GTCTCTGTAA CGTATTCTTC
71151 TTTCTGTCAC AATCTTCTGG AATGTAAAAA ACATTTAAAA TTTACAAACC
71201 TTACAAGAAC AGCTCATGGG CTAATCGGA CCTGGATTTA GTCTGTGAAT
71251 CATAGTTTGC TGACCCCGCT TTTTAACCG TATGTACCCT CCTTCTCGGG
71301 ATGTGAAAAA TTAGTGCAAT TGCAATGGAA AATAGCAAGA AAATGGTAAG
71351 GGCCTGGAAG AGGCAGCAGG ATTACATCAG GTGCTATCCC TGCTCTGGTG
71401 AGATGAAACT GGGGATCATT GAACCACCTG GCATTTGTGA AAGAGTTCTG
71451 CTTTCCCTCT GAGATTCTTT CAGGAACCTC ACACCTCTAG CAGCCCGGAG
71501 AACCGTGGGC TGCAAGGAAA TGCCTCCTCA AAGGAGTAGA AAACCTGCAG
71551 GATAGAAATC ATCACATCTG TCTGGCTTTT CTCAACCTTT CTCTTCTGCA
71601 CTTTCTTGGA TATAATCAAA GCACTACCAG GAACTCCAGA GTCGGCACCT
71651 TTTTCTTTT GTGTTTTCAT TTAATTATTT CTCAGCTGCT AAGTGTGTTGA
71701 CTGTTTAAGG GACTCTAGTG GTAAATATTT GTCTTTAGCC TGGCAGAAGC
71751 TGTGGTTTCC TTTGATGAGC TCACACGGTG TGGCTTTTAA GATGCTGCTG
71801 ACCAGGACAG CTGACTGTCC CCAGTGGGTG CAGTCCCCAG CAGTGGGCTG
71851 GACCCCTTCC AGAAAGCGCT GCTGGGCCAA GAGGCTTCCT CCAACTTCCC
71901 GCTGCCCCCA TCTAACCAAC ACCTCAGTCT CTTCTCCACC TGCTTCCCTG
71951 CCCTCTTCTT TTCCCTCGCA GACACTTTCT TCTGCTTGGC AAAAGGAATC
72001 TTGTTTCCAT GGAAGCCTCA TTAATCTGCT ATCTTGCTCA GTTGGGTTT
72051 GATCAGCGCT GCCAGAAGTA TTTTTCAGCC ATGCAGTTGC GTAATGAGAT
72101 AGAGATTGGG GAAAGGGGGA GGTGACTGTA TAGGCAGAGG GTTTTTTTAA
72151 AAAAAAGTGA GAAAGAGAAG GAAACCTCT AAAGAAAAGA GTTTTATGGA
72201 ATTGGAAGAA GGATGGAGCA CCTCTTTTGG GAGCATGAGG CTGGTGTCT
72251 CTGGTTAGCT CTTCCCACTG GAAAGCCATG GACACTTGCC ATAATACCTG
72301 TCCTGGTCAC ATGTCAGGGG AACCTCTGAT CTCCTTTTCC ATGAGCTTAG
72351 TTGGCCCGAC CAGGTGACA CTTATGCTAG GGAGTGTGAT TGATGTTGCT
72401 GCTTACAGAT TTCCCTCCC ACAGACCTGA TGGGGCAGCC AGGATAGTGG
72451 CAGAGAAGAA GACAGAGCAA TAGCAGGAAA GAGAGGACAA CACTAACACA
72501 TTGGAGGTTT ATGTTCAAAG ACGGGATCTA GGGGGTCAGA GAAAGCACAC
72551 CTACCATTTA ATGTGTGCTG GAATCTGATG CCAAGTGCAC CCTTGGCTTC
72601 TGAGGTTCTG AGAACTCTTG CTTGTGCTTT TCAGCCAGAC TATGCCCTCA
72651 CCTGCCCTG TACTTTAAAG AGCTCTTTAG GCTGGAGTGG TTGTTTGCTG
72701 TGGATTGTTG GAGTGTGTGT GCATGTTGTT GTGTTCTTGT ATTACAAGAC
72751 AAAGAGATTA AAAAAAAACC ACATGCAGCT GTACAGCTA ATGTTTATG
72801 AACTTTTACT ATGCCACATG GTGTTTAAAG CATTCTATAT GTGTTAACTC
72851 ATTTTCCCTA ATTCTATGGA CTAGACACTT AAACAGTCTC CATGTACAA
72901 ACAAGGAAAC TAGGGCACAG AGAGGTGGG AACTCATTG GAGGTCTCTC
72951 AGCTAATTA ATGTGGAGCC AGGTTTGTGA CCCAGACAAC CTGATTGAG
73001 AATCTGCAGT CCTAGATTAG TAACGTGTTG TTGGCCTGTC ACACATTTTA
73051 AATGACATTC TGTACACAGA ACCATTTATA GTAATTTTGT ATTGTTGAGC
73101 TGAAAGCAGT CTCGAGATGT GCTGCTGGGA TTTCATTCAT CTTCAAAGAG
73151 GTGTTTTTT TTTTTTTAA AGGAAAATGC TTTTCTGAGG GTGGTATCTA
73201 AATTCATAAA AATCTTTACG ATCAAGATTT TCACAAATTT CATTCTGACT
73251 CTGTTGCATT GCCCTTCTTC CCATATTCCC AGTTAGTTTG TATGATTGCT
73301 TGCATCTCCC TTGAGCCCAT GGTCCCCCAC AACATTTCTT GCAGAAGTGT
73351 GTCCTGCCTT CACACTGTCA GGCAGCAGGA GCCTCTCTAG CGGCCAGCCC
73401 ACAGTCTCTG AGCTCCTTCC TCAGGACGTT TAATTTCCCA CATTCTATG
73451 CAGTTACCTC ACAGAAGGAT GGCTACGAGG GCCTCACTTG GCTTGGCAAG
73501 TTGGTCCCC TTTTACTCAC AAGACTCTGT TTATCTCTTT GTTTATCTTT
73551 GTTTATCTCT TTGTTGACCT GCCCTCTTC AAGGCCTCAG TTTTCTCTGA
73601 AGTTTACAGC TTCCCTCCTC ATCCCGCAAA AGACCAAAGT GGAAGAGATG
73651 AAACCAGAAT CCACTGCAAG CCCCACCTGC CACAGCCTCT CCTCTAAATG
73701 CATTCTCTGT TGTGTTTAGG ACTTGAGAAT GAAGAGGGAC ATGAATTGAG
73751 GATTTGTTTA TTATTCTTTA CAATATCCCT GTGAGCTGAG TACTGTAAT
73801 ACCCCCATTT GATACATGAG TAACTGAGG TGTGGAGTGA TAGAGGAATT
73851 TGCTCAAGGT CACATAACTA GTAAGTGGGT GGAGCTGTGA TGTGAACTG
73901 GGCAGTCTGA TTCTGGGACC TGTGCTCTTA ATCAACATC TATATTGCCT
73951 CCTACTTGAA AACATCCAGG GAAATGTTG AGATAGATCA GCTGAAATCT
74001 TCTTGACAGC TAAAGCAGGG GCCACCTGTC CTGGAGTTAC ATTCATCTTG
74051 TTCATTGTCA ACGATTTGTG TTCAGTGACA CCCTCTTCAG CCCAAGAACT
74101 TACCTGGGTG CTGTGACAAT TGGACATGAC TAGGAACAAC CAGTGACATT
74151 GTAGCCCATC CAAACACAGG GTAGGAAGTG GATGCTTGTG ACTCTCTTT
74201 GGTATATAAG AGCAGGAACC CAGTAAAGGC ACCTTTTATA TATCTATAAA
74251 GTTGAATATA TAAGATATAT GGGGGCCAGG CACAGTGGCT CACACCTGTA
74301 ATCCGAACAT TTTGGGAGCC CAAAGCAGGT GGATCACCTG AGGTCAGGAG
74351 TTCAAGACCA CCTGACCAA CATGGTGAAA CCCCATCTTT ACTAAAAATA
74401 CAAAAATTAG CTGGGCGTGG TGGCACACAC CTGTAGTCCC AGCTACTTGG
74451 GAGGCTGAGG CAGGATACTT GCTTGAACCC GGGAGGTGGA GGTGACAGT
74501 AGCAGAGATT GCGCCACTGC ACTCCAGCCT GGGTGACAGA GCGAGATTCC

FIGURE 3, page 21 of 61

FIGURE 3, page 22 of 61

78101 GGATTGAAGT GAGGAGGGGC ATCAGGAAAG CATTCCAGGA GAGCTGAGGG
78151 ACACCTTGAGC ACACCCCTCAA AGAATGACTG GGGGTCATGA GGTATACAAG
78201 GGAGGGAAGTG CACCCGAGAC AGAAACAATC ACATAAGCAA AAATGCAGAA
78251 GAATATGAGG ATCGGGGAAG GGCAAGTAGC TCAGTAGTGT TGGAGGCCAA
78301 GGGACACGAA GGAAGGTGAT AAAGCCCTGA TGTTAAGGAT AGAAAAATCA
78351 AAGTCCTTTG AAAATCATGT GGAGTTAGGA TCTCAAGAAC CCTACAAGGA
78401 TTTCTTTAGA ATAGAATCAA AGAAAAACAA AGTTTACAGT CTGTGAGGGT
78451 TGCATAGGAA GTAACGTGGT GAGAAATGTT GGCTTGAGAA CCACATATCC
78501 ATAACACAAT GGTGTTTGTAG AGGATTTGGG GGAAGGGAGA GAAAAATCTCA
78551 AATTGTCTCA GTAACATAATG AGCTTTCATG TACATTTAAA ATAGTAATAA
78601 ATGCAATTGT GAGGATGATG GTGAGATGAG CAAAATAATC CAGTTTGTA
78651 TTGTAGTTAT CAGGCTGGCA TATCCTGCAG GTCACACTTC TAAACATGAC
78701 TTCGAAAAAT CAAAGATCAG CTAAGTTTGA AGTAAGTATT GAAAGAGGGA
78751 GATTATGTTG CCTCAAGTTA AAATAGAACG TAAAAGATGG TGATTCAAAT
78801 GATCAAAAGC ACCAAGCTTC CCTGTTAGGA TTCAAGGGAG GGGTGCGTGG
78851 CTCCGACACC AGATATCTGC AAAGCAATAT GAAATGAGAT CAATAGTAGA
78901 CATTGAAAGA TTGAAACTGA TATAGGATAT TCAAGTACCA GCTCAAGAA
78951 AATGAAATGA GACCTAATAA AAGAGAGTAG GAGTCAAGGG GGTATACGAT
79001 ATTAAGAAAG GTGAAGAGCC AGGGTTTGTG GGAAGGAAGG GAGAAGAGG
79051 AAAGAGAGCA GCTCTTTTAA CACAGGAGCT TCCTCCTTTC CCATTCTCCC
79101 TCCTGCTAAA AGCCGAGTTT GTTTTAGCTG AAATGATTGT AAGACAAATT
79151 TTTATTATTA AAAAAGGAGC TATTTTGTGT TGGTTTCCAT TATAAAATCA
79201 GAGCTCTGCT GCCATAAAAT TAAATCCCAT AATAAAATGA GTAGAAAACG
79251 TGATGTCTCTG CAGAAAGGAA GATGCGAGCC CACTCAGTGC CATGCTGGGC
79301 TTGACTATAT ACAAGCCGTG CATCTCCTGC TCGAGTTGT AGCTGCTGCC
79351 CAGCAGTGCA CATTATCGTT GCAGCTGTTT TCCTCACATT CTGAGGTTTA
79401 TGAATCCCT CATCCATCAA TAATTGATCT TTAGCTCTTA GTCCAGGGGT
79451 TGTCAACTGG CACTCCATGG ACCTTAGAG GATTGATGGC TAGGTTTCA
79501 AAGATCTTTG AACCCCTGA AATTATATAC AAAATACTGT GTGTGAGTAT
79551 GTGCATTTTT CTGGTAAGAA GCACCTGAAT TATCGAAGCA GTTTGTGATC
79601 CCCCCAAAAG CTAAGAACTA CTTCTAGAG CAAAGGGAGA TTTTGCTACA
79651 CTTAGATCTG TACACATTTG ACCAGGGCAG CTCACACAAG TGGGATGCGG
79701 TTTACATTT CATGGCAGAT CTGCTTCCAG CTATACAAAT TCATCAAGGA
79751 AATATTGTAA TACTTCTATA TGAATCAGGA ATTCACTATA TTTAACTTAT
79801 TTGGAATAAG AACCACTATA TATATACAAG TTTTCCAAA AGACTGAAGG
79851 TTTCTCTCTG GGCAGGAAGG AATATGATTA GATTCAATGA GCGCCTTTAT
79901 GTTTATATTT CAACTCTGAA AGATAATTGT GACTTTACTA AATCAAACCT
79951 GTATACCACG ATTAGGAAAA TGTGGACTGA TTTGGGGTTC TAGGGGTAAA
80001 ATGTGACCCC TGTGAAGTAC CAATGCACCG TTCTTTTATC TGTGAACGGG
80051 CACTGACCTT CTGAAATTAA TTAGTAGGCA GGAGGACATG CGCATATGAC
80101 GTGATAGTTT AAGTACTGAT AATTATTAC TTGGAAGGGA AGAGAATAAA
80151 ATTCAGAACA CAGTATTCCT TAATGGGAAA TCAACTTAGA GGAGGTAGGA
80201 GGGAGATCAA GCAAGAATAT TTCTGGTAAA ACATGCATAA ATCAATGGTC
80251 AGCCAAATGT TGTGCAAAAG AAATATCTT TCGGGGAAAA CAGTAGAAGG
80301 CAATTGAAAA ACAAGCATCA GGCTGCATAA AAACAGCAAA CAAAAGTCAC
80351 AATGGCTTGA TTGTGTGATG AGGTAATTAA TGGCTGCAGT TAGCAAAATA
80401 TGTTCAAAAA AAAGACAGAA AGGGTAGTTA CAGGAGAAAA ACATCCCCGC
80451 AGATCTTCAA AATCAGAAAC AATGAAAAATA ATTATTTCAA AAATTAAGAA
80501 AAAAATCTCT TAATTTATAC CTGAATTACC TGGATAATTG GTAAAATTTT
80551 CTGCATATAC AAATCTTGGT CCTCTGCTCC TCTCTCTATA AATAAATAGA
80601 AATGTATGAA TCAATAGTCA GCCAATGTGT TGATCAAAGA AATTATCTTT
80651 TGGGGGAAAA TTGGTAGAAG CCAATTAAAA AACAAAGCAT ATATTGATG
80701 AAAACAGCAA ACGGAAGTCA CAATGGCTCG ACGGTGTAAT GAAGCCACAC
80751 AATATGTATT AAACACATCA TCTACACAGA TGGATTCAA GATACCTTCT
80801 TTGTGTCTAA GTCCCCAATC TGTGTTTCTT GGCTCTGTTT CCTCATATCT
80851 AGTCATTCTC CAAGTCAGCA TGCCCAACTT GAAAGTGTCA TTTTCAAAC
80901 CTGCTTCTTC TCTTCTGGAA GTTCTTCTTC TGCCCATTCG TCCACAATCC
80951 CCACCTCTTT CACCCAGTAG CAAACCTTAA ATTTATCTTT TACTTTGTCT
81001 TACTTCCCCCT TCTTATATTC AAAATGTTTC TCACTTGTCAT CTCTTTTCAT
81051 TCATTTTATA AGCATTTATG AGCTCTGTT ATGGTTTGGA AACTGTTCTT
81101 CATGCTGGAG GTGGTCTTAT AAACAAGTAA TTTCAATTGA GTATTTAGTA
81151 TGTTAAGTGC CATCCCAAAG GCAACACCCA GCTGTGGGAG GCTCCCCAAA
81201 TCAGTCTAAG GAAGTTGGGA AAAGCATCTC AGAGAAGATG GTGTCTGAGA
81251 TGGGGAGGAT GTGTGGAAC TGGCAAGGAA GAGAACAAGT AACACATTC
81301 TAGAAAAAGG CCTCTTTCAG CATGCTAAGA AGTTTGAGG ACAGAGGAGT
81351 TACCATTCAA AATTTGGAGG GAAGGAAGAG CATACTGAGG TTTGCCACTT
81401 GAACAGATAA TTTACGCTGT GTTGGGTGAG TGAAGTTGAG TGGGTACAAA
81451 TCAGGTCAGG AATATAAGTT AGGAGACTGT TACTAGAATC CAGGCCAGAG
81501 GTGATGGTGG CCAATATATG AGAGTTTTAG CAGGGAATGA AAAAAAGAAA
81551 ATGTGTTTAT GAGGTAGAAG TAGGTAAAAA CAACAGGATC TGGTTCCTGA
81601 TTGGAATATG GGGTAGCCTG GAGAGGAAGC CAGAATGCAG GCAAGAATGC

FIGURE 3, page 23 of 61

81651 ATAGTGGTAC CATCCACTGA CATAGGGATT AAAGGAGGAG AAGAAGCTTT
81701 GGTAAAGAAA ATAAGAAGTT CAGCTATGGA ATGTTTGAAT TTGATTTCTC
81751 TGATGAGGAG TAGTTCTAGG TGATGATAAT GCTCAGGGTG TAGACTTGAG
81801 AGTGGATGGG TAAAGTAAAG GTTGAGGCTA TTAAGGGGA AAAGGTCAAG
81851 GAACTGAGGG CCAAGGATTT ATAATAAGTT ATCTTGGGCC ACTAAAGCCA
81901 CGCAGGATGC TGGCAGGAAA CCTATGAGCC AGGTCTTCAA TGTTGAGTCC
81951 AGTGACTCAG GTGTGAGAAG CAGCAGGAGA AGCATTGATA GCCTGATGGG
82001 GAAGGAGCCG TTACCTGAGA GTAGCAGAGA GAGTTATCCT AGCTGACACA
82051 GCTCTCAGGG ATTTGCTTCT AAAGCAATCC TTAGGAAAGA AAGAGCAGTA
82101 TCCACAGGAG ACTGGTGGGC ACTGGCTTCC CCAGAAAACC TACCTAGATG
82151 AATTCTATTTC TCAAGGGACT CCTATTAGA TAAGGGGCTT TGTAGTTCT
82201 CAGAGCAACA CCAAACAGAT GTATATCTCA TTAAGTGGCC CCACAACCTT
82251 TCTGCTCTGG CCACATGGGC CTACCCACTG TCTGCTAAAT GCACTTCATA
82301 TTTTCTTGTT TCAGTGCCTC AGTATTCATA ATCTTCTTTT CCTAATCTCT
82351 GCCCCTCACT TACCTGAATC TTTTGTATTC TCAATGACCT GCTCCATCCC
82401 AGCCCTTTCA AGAACCTTTA ATACCTACCA AGTGAATACT CTCTCCATTG
82451 ATTACACACT TCCTGTAGCA CCTGTTCTAT AATTATGAAA TATTACCTAT
82501 TGTACACATA TATTTCATC TCTTGGTGGA CAGAGAATCC AATTTATGCC
82551 TTGTCAATTT GTAGCACATT TCCTTGCATA TGTAGATGCA CCATGAATAT
82601 TTAGAGAACT TGTAGTTAA TTTCTGTTT AACATGGGCT GCAAAGTTCT
82651 GGTCCATGCA CGTCTTTTAT AAAATAGAAA TGACGGATGG TGCATGGAGC
82701 TTAATTTCCA TGAAGCAGAA ACATATGAGA GATGGAGCTG AATTTGTTTG
82751 CCTGTACAGC TCTTACAGCA ATTGCTTCCA ATTTGTTTGA TTTACCTAAG
82801 AGCTAAATTT TGAATGGCA GCTCAAATGA TTTTCTGTGA CATTGAGAAA
82851 ATGAGTTTGA ATATTTGTTG GAGAGTAACT GCTTAAGACA TGAAAAAGGG
82901 GGAGATTATA GCTTTTAACT CTTTTTTATG GCAGAGCATT AAGGAAAAAA
82951 AAGTGCAGAT AAATGAGATC AAATGGCAAG TGTCTGAACC TGCTGGACAC
83001 AAGTCCCGGT AGCCATTGAT AGACAGTGTT TATATGACTT CTGGGCCATC
83051 AATAGATAGA TAAGGTACAT CAGCGGCCAA TGTTCAGGA AGTTTGAGAA
83101 GATAAATGGA AGTTGCACAG CAGCCTAAAA GCTTCCCTAG GAGGGCTGTG
83151 CTCCTCCAGA GCGCCATCTG CCTGTGCTT CCTGTCTTCT TTCTTCACAT
83201 TAAATGCTTT TCCTTTTCTC ATTTTATGA TGGTTATCCT AAAGATATGC
83251 TAGCCTGGAC TTTGACAAGG ACATCTGGAG ATAAGAAAGA TTCTGAATTA
83301 TTTTTCCTT TGGGCAATTG TAGCAATTTT AAAACTATGT TAGATGGCTA
83351 GAGATTCTTG AGAATATTTC TTTTCTTGGA AAATCATAAG GCTTTGGATA
83401 GTGGTACCTA TAGAAGCTGA CATCAGCAGC AGCCTGCCTC CAGTCGATCA
83451 GGGCCTTTGG AACTTCACGG GGCTCCTCTA CTGACAGCCC CATCGGTTTC
83501 CCTCCAGCAC ACGTAACTCA GCATTGACTC TGGGTAGTAG AGGGTGGTTT
83551 ATGGAATCTG ATTCATCTCA GAAAGAGGTG GATGCAAACA CATTCCCAGA
83601 GCAGAAAGCT TGGCATGTCT GGTCTTAGGC AGAGGGAAGT GGAGATACTT
83651 GTCCTATTGT TCTTGAGATT CCAGCAAAAA TAGCCCATTA CAGAGGAAGA
83701 AGATATCAGG TCAAAATGAAG GCTTTGGTGC TACAACATTG TCTTAGAAAA
83751 AAAAAAGAAAG AAATTGGCCA AGTGCAGTGG CTCAGCACTT TGGGAGGCTG
83801 AGGGGGGCGA ACCACTTGAG ATCAGGAGTT CGAGACCAGC CTGGCCAACA
83851 TGGCGAAACT CCGTCTCTAC CAAAAAGTAT TAAAAAATAG CCGAGTGTGG
83901 TGGCGGGCTC CTGTAATCCC AGCTACTCGG GAGGCTGAGG CCGGAGAATC
83951 ACTTGAACCT GGGAGGCGGA GGTGTCAGTG AGCCAAGATC GTGCCATTGC
84001 ACTCCAGCCT GGGCAACAGA GTGAGACTCC ATCTCAAAAA AAAAAAATAA
84051 GAAAAAGAAAG AAAGAAAAAA GAAAAAGAAAG AAATTAATTT AAAAAAATTG
84101 TTTTTTAAAC AAAGGAAGGC TTTGGGCTTG GAGTCCAATC AAGCTAGGCT
84151 GGAATCCCGG TTTCATCTCG CTTCTCTGTG CAACTTTGGA TTTTACTGAA
84201 TCTCTCTTAT TCTCAATTCC CTCCTCTGTA AAATGAAGAT AATGCTAGTA
84251 CCTGTCTCAT CAAGTTGAAG GAGACTTAAA TGAGATGTGT TGAAAGCATT
84301 TAGCATAGTA TGTGGCACAT AAAGAACACT CAATAAATGC TGGCTATAAA
84351 GAAGCCAGAG AGAGACTCGG AGGTGATGAG AGAGGCCACA ATCCCTCCA
84401 TTTCATTGAA AAGCAATTTT TATTATCTCA TTTGAAAGGC AGTATAGTAT
84451 AGTGGTTAAG GACATGCACT ATGGAGCTAG ACCTCCTCAG TTCACTTTCT
84501 GTCTCTATCA TTTATTAGCT GTGACTTAAC CTTCTTGTGC CTCAGTTTTT
84551 ATCATTTTGG AGAGAGGAGT AATAATAGTT CTTACTCTGG TGTGTTGTGG
84601 AGATTTGATG AGTTAATACA TATAAGCAC ACATAGTAGT GCCTGGAGCA
84651 TATTAAATGA CATGTAAGTA TTAGCTGTTA TTTTATTAAT CAACATGTGG
84701 CATAGGACAT ATTGGAACCT TGAAGTCTTT GAGGCTCTTC CCAGTTTCAT
84751 AAATCAGAGA CTACAGTATA AATATCTGCT TACATGTCTG CTTTCCCCAT
84801 TGGACTGCGA GATCTTGAAA CTGTTTATT CATCTCTGCA TAGCGTTGGC
84851 ATCGTATTAT GACACTTGAC ATTTACCAGG TGCCAAATGG GACTGGGCAT
84901 GTTGTAGGGA TTCAGTCAAT GTGGGTCAAT GCAGGCGGGG AGGTGGGTCG
84951 GGTAAAGGTT AAGAGAAGGG CCTTGGGGCA TCACATTAAG TAGTTACCAG
85001 ATTGAAGTGC AAACATTGCT ATCCAGGAGA AATCAGGTCA ATATTTACC
85051 TTCATGGCAA TACCAGTACA GTCCAAGGAG AATGCATAGA AGGAAAGAAA
85101 TCATAATCTG ATTGTATGTG TTTTTTTAGT AGTAAATAAT AATAATTATT
85151 ACTATTCCTA TACAATTTTG TGTGTGGTG TGTTTGTTT TGTGTGCAAT

FIGURE 3, page 24 of 61

85201 GAAAAATGGG GTGCTAATCT ATTCCCCTTC CCAACACCAG TGCTCAGAAG
85251 AAATTTCCAC AGATAGAGAA GCTATAGGTT ATGAATTTGG CCTTGATGGA
85301 TTCTGGGTCA CTATTTCTCA ATGTTTGTC ATGTCATGTG AAGCTCTTAA
85351 GATAAAGAAC AATGTCTTAC TCGTCTTTTT AACTTCTTTA CCCCCAATG
85401 CCTATCACAT ACTTTGCCCA TGGAAACTCA ATAGACATT GTAAATGGAA
85451 TTTAATTTCT GAGGTCCAGT AAAGCCTTTT TCCATCCTTC CCCTACTACA
85501 CAGTTTGTCT AACCATGTCT TCCCTTCCAT CATCCACCTT ATAAACGTTA
85551 TTAATTCATT TTCCATCACA TTCTTGACAC CTCCCATGTC CAATGTCAAA
85601 CAAGTACCAT TTGGGAAACA GAATTCCTAGG AATCTGGAGA CCTAGAGCTC
85651 TTCAGACCCT GAAATCCAGT TTTCTGAGCT GAGACAGTTT CTTAATTTCT
85701 CACTCCAAC TCGTTTCTCC TCTTCTCAA TGGATATTTT CCAAGTCTCC
85751 ATTAGGCATA TAGCAATTCC AGAAAACATT CAATTTTCCC TTCTCTTAAT
85801 GCCATGCTCC AAAACACCAC ATTCCCTCTA GACATTGAGC ATTGGAGAGA
85851 GATGGAAAAG TACTTTGAAA ATGTGTGCAT GTGAGAAAAA TGCTAAGTGT
85901 TCTGTCTGGT CACTTCAATG ACAAGTTTGC TACTTTAGAA ACTTGACTAA
85951 ACAGAGTGTG AGGAAAAACA TGAAAAAGAA AAAATGTGTT CAGCTTGGCT
86001 GAATAATGAC CAGCAGGGTG AAAAGATAAG ATAACCACCC GCTCACAGGA
86051 TTTCTATCCT CAAGCCCTAG AAGGTTGACA ACAGCAGACA CTGAAACTAC
86101 TCTTAATGGA GGGTGTGCTA AAGAAGCAAC ATTATAGCCG CTTTAGGAA
86151 AGCAAAATGAC AAAGTTGGTG AAATAGAGAA GATGCCAAG CATGTGAGAT
86201 ACCACCTCCA TCTTGAAAA TAACCAAGGT GATACAATGT TATGCAGGAC
86251 CCCTTAATTA AAACAGATTT AGTGATTAAT ATCAGGAGCA TTGTCAAGAA
86301 TCACAACAAC AGCAATTAGT TACTATTGAG CAATTTCTGC TAAGTAATTT
86351 GCAGGAGGAC ATCTCACTTA ATTTACACAT CCTTTTATAG ATGAGAATAT
86401 AGAGGCTTAA AAAGGTGCTT TTCCCAATGT TATTCAGCTA TAAGTGGTCA
86451 GTCATGACTC AAACATAGGT CAACCTGACA ACAAGATCTT CACTCTTAAC
86501 TTCTCTTCTG TGTGTGAATA CCCTTGATCC ATGGAAATGG ACCATCTTCA
86551 TATACTGCTT TTTTGCCTCT GGAATGTCCA GGTATGGATT GGGTAATGCT
86601 CAAAGACAGA GAGGAATAGA GTATTAAAA GATCCCTGGC CTCATTTTCT
86651 GAAGACATGA GCCTAAGCTG AGCTGTACCA TTTACCATCT ATGTGAACCT
86701 GGGCAGATTT TTTGACACTG CTGGGTCTCA ATTCTGTAA CTGTCAAGTG
86751 GAAGTAGGCC TAACTGCATA GACTTCACTG GGCTGTTAAG AGAATAAAAT
86801 GAAATAACTG TAAACAGAAG TGCCTAGTGC ACATGCAAAG GATTATTGGG
86851 GCTTTCTACC CTTCAGGGAT TAGAAGTTGA TAGTAGGCAA CAAGTTATAA
86901 GAAATACAGT CAATTGTCTG CTGACCAGGG CTAGAGTTAA TTGTCTCTGG
86951 AAAAAAGGAC TTGCCTCTCT TTCTCTTCTT CCTCCAAAAC TTAAGACGTT
87001 TGCAGCTGAA TCCCCAACAG GATTTTGTGT TCCTTTGGGA GAGAGGAAAC
87051 AGACCAATAT ACCCCCAAAA CTAACCCCAT AATTTCAATT CAGCAGTAAA
87101 GTGAGGTCTT GATAAAGTGC CCTGCCAAC CTGCAGGGTG GTTGGGAAAC
87151 TCTGAATGGT TCATCATGGG GAAGCATTGT GTCCACTGTA AAGAGCTCTC
87201 CGGAGATGAT AAATCTCATC AGAAGGCTTC ATGCTTGAGG CATGGATTCT
87251 TGGAAAAACA ATCACTCTAC GTATGTGGTC AGAATCTAAA GGAGATGCTG
87301 GGGAGAGGAG CTAGGTCAGT CTCCAAAGTG GAACAGTAGA AACTAATCAT
87351 GTGGGAAGAA AGAATATGAA GGTTTTAAAT ATCAGAAATG GCCACCTTCC
87401 TTTGGACCAT GAGCTCAGAT TGTGAGGTGT GACTAGGTCA CGTCTCCTTC
87451 CTGCCCTGT TTCCCTCCTC TCCCTACCTG TCCCTCCTTG ACCCCAGGAA
87501 AAATTGCCGG GATATGAAAG TTAATTATGA CCCAAGGGAA TTGGTACAGA
87551 TGGGGAAGAA AGAAATGCAT TCAAGAGCAT TTCCATCAGT ATTGAAATTA
87601 CACAGAAGGC TGGTGAATTT GGGCTATCCA TTCTTGCTC CCTCTGTGCC
87651 CATAATTCCT TGGCTCCTT CAATTTCAAT TTCCCTTTGG TTCAGAGGAA
87701 TGCTTGATGG CTTAAGCTAG CCTCAGTTGG CCAAGCATTG GAGAAACAGA
87751 GAGGTGTATG ACACAGCTAC ACTCCCATGG GGCTTACAGG GCAAGGTGAG
87801 AGAAGACAGA AGTTGTATGT GCTGGGTGCC ACGTGGTAGC TACAACTAG
87851 AAATGAGACC AGGTTGCGAA GAGGAAGAGG GCTTGACAGC CTGAGTCATG
87901 GGGACAGTTT CTTCAGGAAA TGGGATCTCA GCTCTGCCTT GTATGCAGGG
87951 CTTACATAAT AAATATGTTT CATTGTTGTT GTTGTTATTG TTGATTTAAT
88001 AAGATTTTGT TTTAAGAAGA TTTTGTAATA ACAACTGAAC AAATGCAATC
88051 TCCTGCCAGA GCAGGCAGCA GCAAAGGAGA TTAGGAATAT AACCCCTTG
88101 GAGACGTTCC TTCACCTACC TGGTGCTGGA TTACCTAAAA GCTTCAGCTA
88151 AGTAGGTGTA CCCCCTCAAG AAATATTTT AAAAAAATG AAATCTGATA
88201 TTTTATAGAA ATCTTATCAA GGATATTTAA TTGGACTATT TACACCTATT
88251 TAGGGTCAGT CGGTTTGGGA CAAGTATGCA GGGGTCTTGG AATCAGACCA
88301 CTGGGGTCAA ATCCTAGTTC TGTCACTTCC TAGCTGGGTG ACCTTGGACA
88351 AAGTTAGCTG ACTCTAATA GCTTCAGATT CCTCATGGGC AAAATAGAAA
88401 TGCTACTAGT ACTTAATAGT GCTCTGAGAA GGATTCAATG AGAAGGATTA
88451 AATGTATGTA AAGCACAGTG TTTGCCCATA GGAAGCTGTT ATTTATAAGG
88501 GAGGGGAGCA TCCTAAGGTC CTCCGAATTT AGGAGAACTA AAAATCTTAC
88551 ACTGACTTCT CCCTTCAACA GCACCTTCAG AATCTCCTTC ATTTTTCATA
88601 CTGTTCTTTC AACCTTTTGA TGAATGAGAA ATTAGGCATT CTTTCCCTGC
88651 AGATTTTCCC AAACCTTCTG CTTTGCCCAA TAAACATATT TTTAGTCCCA
88701 ATCTTGCATG CTCCCTTGGG ACTTTTCATC TGATAAACAT CCCCCTCTGT

FIGURE 3, page 25 of 61

88751 GCTCTTGAAT CCAATACCCT TCTTCCCTGC CCTCCACCCA GAGTCTCCTT
88801 GTATCTGCTG TTAGGCACAA TGATGACCCC ACCAAGGTCA GACAATGGCT
88851 GTGGCCTCAC CTGGACCTTG ATGACCCACA TAGCCTAGAG CCCAGAGATC
88901 AGCCACTGAT GGAGGCCAG AGGGCAGTTG GAAACTTCA CAAGACAATC
88951 CAGCCTGATT GTTTTGACAT GCCTGACTTC AGGCTGCTAA AAATGAGCTC
89001 GAGGAATCAG ATAGGAAAAA GAGATAGGTG ATGCAATTTT ATTCCATCTC
89051 CCAATTTCTT GAGTCAAGAG TTGTTTGT TTGTTTGT AACTCCAGTT AAATTAGTAT
89101 TTATCCAAAT TTCCTGGGTG CTTGTCCAAA GAAAAGTACC CCAGATCTAC
89151 AAATTAGAAT CTGGGACTGG GACTTAGGAA TTGGCACTTT TACAATTATA
89201 CCAGATGTTT CTAATATGAG TACTTCAACC ACTACCCTTA TAGAAGTGCT
89251 GCCTAGGACC CTCTCTTCTG GCAGGTGAAG TGGAAGGAGG TTTGTGCGAA
89301 GGGAGATTCT CCACCTCAAC TTGAGTGTCT TGGCTTGAT CCGCTTTGTT
89351 TGGTTCTATT TCACCAAAGG CTTTCATCTT CACATAAAT TTCTTCAGCT
89401 TTAATAAAT AGTTTTGGTA ACCATTGGTA TACTGGAAG AACATTAGAT
89451 TTGGAGTCCA GGTGGCTTGA GTTCAATTCT CTGCTCTGCC ATTTACCAGC
89501 TGTGTGACAT TGGGCAAGTT GCCAACCTAT CTATGTCATT TCCTCATGTA
89551 AAGATAATCC CACTTCACCA GGCCACTTTT GAGGACCCAG TGAAATGATG
89601 TGTAACCATT TTAGGAACAC TGGATCATTC TACAGTGCAA TTTTTTACAT
89651 CAGCTTGGAG CCTACCATGT AGGCATTCAA ATCCACTGAG TGTATGGAGC
89701 TCCGTGCACA AATAAAAGGA CTTCTCTTTT CTGCCCCTGT ACAACTTTGG
89751 TTTCTTAAT CAATAGAATC CATGACAATC CTGGGCCATG GTATAAAGAT
89801 GGGACTTTCT TCCTGTGAAG GAGTCTGGTC TGAACATCTT CCAAACTCCA
89851 ACATAACTGA GTGCATTTCT CCACCAACC CCATTGCTG TCTCTGACT
89901 CAATTGCTAG AGAAGCCACT TAAGGAAGGT TCCTGGAGTT AAGGCTGTGT
89951 CTGGGCCAGT GTAGCGAGCA GTTTTCAACA GTCAGTCCTC TTTATCTTCT
90001 CTTTTCTGCT GAGCCTTTAC TAAGCACTGC CTCCTCCTGT CTCCTTACTG
90051 CATCTCTGTA TGGAAATGCAC AGGTAAATCT CCTTGGAGAG TACCAGCCAG
90101 GAACAGTCCA CAGCCAAGGC CACCGATCCT CACCGCTGAG TCCTCATCTT
90151 CCTTTCAAGC TGTCTTCCC CTCCCCTCCC CACCATCACC ATAGCAACAC
90201 AGTGGTATAA AAAAATGAAA GCGCTAAGGC ATCTAAATAT AGTCTGAGTA
90251 TCAACTCTTC CAGCATGGAG CCGAAAACCT AGGGAATGAC AGCTAGAGGC
90301 ATCCAGACGA TAACCTGGCAG CCAGGAGGGT GGATAAGTCA AAGGAAGGGG
90351 TCAAGGAAAG AGGGGAAGGA AAGGGAACCA TCACTTGCTG AGCCTGCTGC
90401 CTGTGCTTTC TCATGTCACC CGCAGGACAA CCAATGTGA ATGTTATCAT
90451 CTCCAGGTAA CTGCTGAAGA AACGGAAGCT CAAAGAGGTA AGAGATTTGG
90501 CCAAGTCTAC CAGCTATATA GCAGTAGAAC TAAGATTFTA ACTCAAGTTT
90551 CTATGGCCCC AGAATTTATG TGTCTCTCTC TCCATACCAC AGGGACAGGT
90601 GCAAGTGAGA GATTTTGCTG GAAGCACTGG GCTTTTTGAG CAGGCCATAT
90651 AAAAATCTCT AGCCCAGAGC TCAACTAAAT TATTGGAAGA GACTGGGCCA
90701 AATATAAGGG TTCTATCTAA GCAGCACCTG TGTCTCTCAA GGACTGAGGA
90751 AAATGAAGGG GGAGGGTTGG CAAGGCTGCA TTTCCCAGGG TGCGTGATTA
90801 TATGGCATGG GGGTGGGGGC CATTATGATG CCCGGACATG GAACCTACAC
90851 CAGTGACGAA AGGGTGTGAT TAGAAGCCCT AAGCCAGAGA ATGTTCACTG
90901 TGATAAATCT CATTATTTT TCCCTCATTC ATTCAATAGA TTTTTTTTTT
90951 AGATGGAGTC TCACTCTGTC GCCCAGGCTG GAGTGCAGTG GCACCATCTC
91001 AGCTCACGGT AACCTCTGCC TCCTGGGTTT AAGCAATTCT TGTGGTCCAG
91051 CTTCTGAGT AGTTGGGATT ACAGATGTGC ACCACCACGC CTGGCTGATT
91101 TTTTTTTTTT TTTTTTTTTT TGTATTTTTT AGTAGAGACA GGGTTTCACC
91151 ATGTTGGCCA GGCTGGTCTC GAACTCCTGA CCCCAGTGA TCCACCACC
91201 TCCACATCCC AAAGTGCTGG GGTACAGGT GTGAGCTACC GTGCCTAGCC
91251 TCATTCAACA GATATTTTTA TTAAGCATCT GATGTGTGCT TAACCTGGA
91301 AATATAAGGG TGATTAGAAC AAATGCAGCT CCTGCCCTTG TAGAGCTTAT
91351 TAGGATAGTG GAGAAGACAA ATAAGGAAAC AATTATACAA TTGATTGATT
91401 CTTTACAACCT GTAACATGTA CTATAAGTAC ATAACAGAAG AATATCACTT
91451 GCCTGATGAC TTCAGTGAAG GGGAAATACA GAAGTTCTTA CAAATCAAAG
91501 CAATCCCCTG GGCCAATTGT AAAGGTGATG CCCACTTTCA AGGTGGACAG
91551 AGACTGTGCT AGAAGCTTAG CCTCAACCAT GGGTTTATAT GATTGGTAGA
91601 CCCTGCAGAT CCAATCCCAA TGGTGTATCT TCATACTAAT CATGAAATCC
91651 ATCTAATAGC CATACAAGTG AGGTTTTAAA ACCCAACAAA CTAGACTCAA
91701 ATGAAATCTG ATAGGGGAAT TTATGATTTG TTCTTCTTAC AGCCTTTGGT
91751 ATCACTGACA TAAACTGAA TGTATGTGCT GAGGGTGCTT GTGTCTTGGT
91801 GATAGACAAG GTAGGTGGTC CAGCCATGG TACTGGCAGC TTAAAGTCAG
91851 CCAGCCATCA GTGGGAAGTG CCTGTGAATT ATGCAGGAGT GGGAGGGGAG
91901 GGAGTAGGCA GTAAAGTAAT GCATTTCTGT GGATCCAAG CTTTCCAAC
91951 TACCTGCAAG TCAGCAAATA TGGGGGATGT TGTATGACTA AGTGAGAATC
92001 AGATAATATA ATGTGTATGG AGCTCTTTAG TTCTTCAGAA AAAAATGCTG
92051 TCTAAACAAA TAGTCTGAT ATCAAAGATA ATGATACAGT ACCCTAATTT
92101 TAATGCTCTG CCACTACCT GCCAGCTGTT TCCAGGGAT GTGGTAAAGA
92151 TGAATGGGCA AGATCTGGGA AAGTGTTTTG AAATCCTTGA TTAAAGGCCC
92201 TCCAGGCAGA TGTAGAATTT TAAATGTGTT ATATTACTGC CACTATTGTT
92251 ATGCTTTCTT TTATACCCCC AGAATTTTAC CATCTCCTGT TTCAGGTGAA

FIGURE 3, page 26 of 61

92301 CGAGTCTGCC TGA CTCTTAC CTGCCCTGAA TGGCATTGGA AAGGTAGCAG
92351 CCCTGAGATG TGCCATATAA ACAAACATGT TTTTAACCAA GGGATCAGGA
92401 GGCCTTCCCTG GCTGGCTCCT GTCAGCTGGT CATCACCTCT CTATAACTCT
92451 AGGCTTTCCC AAGCTTATTT TATTTCCATC AATAGGACAG GAATATGTAA
92501 ATGTCCCTGCT TGAAATGAGT ATTGGCTACA AGCCATCTGC CTCTGAACAG
92551 AGGTGAAAGG TGGAATCGG AGGAAGGGCA GATGCTTTT GCAAGGGAAA
92601 CAGACTGTTT TCTGCCACTG CACTCTGCC AGGCAAAAGA GTAAAGGAAC
92651 AGCACTCAGG AGAATTCAC TGAAGCGAGG CAGGGTGCAA AAGGAACTTG
92701 AGAAATTGGT ACTGGGACCC AAAATCAGAT TCTGGCATT CTGGGAAAAG
92751 AAATGGGCAT GGGTGGGGT TTTATCTGTC AATAAAAGCA TCCAGAATGG
92801 GGCTAGAAGG AAGTAATTC AGTTGCCACC TCTGCCTACT GGACAGCCAC
92851 GGAGAACTTC TCCTTATCCA AGGTCGAGGA GCCCTCCGGA GTACATACTG
92901 ATACCATTGG TTCTCCACACA CATACCCCA TGGAGATAAA AACAGGACCC
92951 TGAAGAGCCCT GTCCGTGTTT AACCAATGGG ATTGAAACAT GGAATGAAC
93001 TGCCCCACAA TCCACCTGT GAGAGACCAA AGAGCAGTGT TGGATTAACA
93051 GGAATGTGTA CCCTGAAAAG GCATTCAGCT TCCACTGGGG CAGCAGGTAC
93101 AGTGCAAAGA TGATCCCACT TAAATTCCTA AGACAGGAAA TAAGGAAAGA
93151 TGTTGTGGAA ACTCAAGACC TCTCAAAGCA TACTCCTTTG TAGTCTCTCC
93201 CAGACAGAGA CCACGGAATT CAGAAAACAC CCTACCTGGT TCCAAACCAG
93251 CACCTGCCAA ACTTCTCACC CTCTTCTGAC CCTGTCTGG GAGTTAAGAA
93301 AAAAAAATC ACTTTATTGG TTGCTCCAGT TATAACTTAA ACAGACAGAC
93351 CATCATCAAA TTAAGTGACA TGTACGACTG CTTATTGTAT GCCAGTTACT
93401 GTGCTGTGGG GTTTTGGTTC CATTATCTCA TTTAATCCTC TCAAAAACCC
93451 TGTTAGTAGT GTTTTATTAT TGCACATC TTAGATTAAG GAAACTGAGG
93501 CTCATAGAGA TTCGGTAATT TGTCAAAGC CCTAAAACAT AATTACTGCC
93551 TCCAGATGTC TCTGATTCTA AGGCCCAGGC TCTTAATCAG TAAATGATCA
93601 AATGAATAAT GATTTTCATG GCATCTGTCA TCGGAAAGAA CAATGGAGAA
93651 TATGCTTAAAC CAAAGTCATA ACCAAATAAA TGAACCTGAG AGCAGAGCCG
93701 TGATTCTAGC CAAGATGACT ATTTTCATGC ATGTTTGA GGCAGGAAA
93751 AGGAGGTTAG ACTTGTGTTG GAAGGGAAAC AGGAGCTATC AAGGTGAAC
93801 TTTCTAAGA GTAGCCCAAT AATAGTGCTC GGGAGGGAGT AATGTGTGCA
93851 AGAATAGAGT CAGGAGAGC AGCCAAGTGT GTGCCTCAG ATCCCTAGCA
93901 CAAATCACAC ACTAAGCATT AAGATTGTCT CTGCAGTGAG AAAGGCCCTGG
93951 GACCAAAATTT GGGCTCCACC ACTTACTGGT ATTCATTAAT CATTCATGCA
94001 TTCATTCAAC AAATATATAT TGCGTGTGGT CTATGTGCCA GAGACTGTGC
94051 TGGGTGCTGG CAAAGAACAC AGACAAGGTT CCTGCTCTCA TGGAGCTTTT
94101 ATTCTGATGA AGGAAACAGA CCACTTACAG ATAAATAAAT AAACAAGATA
94151 AAGGGAAACA GATATGATGG AGAGTAGCTG GAGGGCCAAG CAGACCGGC
94201 AGACAAGGTG GTGGCATGTA AGCTAAGACA TTTAAAAAGA ACCTGGTCAT
94251 GAGACTATCT TGGGAAGGAA AGCTCCAGGC AGAGGAAGCA GGTAGTGCA
94301 AGGCCCTGAG GCAGGAATGA GGACAAGATA TTTGAGAAAA CAGAACAAAG
94351 GCAGGCATGA CCAGGCCGAG TGGGTGGTGG AAAAGTAGTA GAAGGTGAGT
94401 GGGGGAGTGG GGGCATCAAG GTCAGGCTTT GCAGGCTTGA TCAGCGTTCT
94451 CACTGTGGTT CTGGAGCCAG CAGCATCAAT GTTACCTGG AACTTGTAG
94501 GAATGCAAAAT TCTCAGGCCC CACCCAGACC TGCTGAGTCA CAACTCTGG
94551 GATGGGGCAC CTCATTGTGT TTTATCGAGC CCTCCAGATG ATCCCGAGTA
94601 TGCTAAAGTT TCAGAATTCC TAGGTTGGAT TATGCAGTTC AATTTTAATT
94651 TTAAATGCTA TGGGAACCTA TGAAAGATT AAGTAGGGGA GCAGCATGTT
94701 ATAATTTTCT TAAAAAATT GTTTTAAAGC ACTCCTGCTG AGGAGAGAAT
94751 GGACCATAAC AGGCTAAGAG AAATGGAAGC AGGGAGATAA ATTAGGTGGT
94801 TATTGCAAGA GGCCAGGTAA GAAGAGAAAG TGGTTTAAAGT AGGGTGGTGT
94851 GGCAGAGAAAG ACGGTTCCAA GCAGAGGGGG ACCACGCTGA CAAATAAGCG
94901 CGGGCCACTC ACGCAAGCCC AACAAGGCAG AAGGCAGAAG GCAAAAGTGA
94951 AGGCCAGAGA AAATGGACA CCACCTTTCC AGAGCACAGT TCAAAGGCAA
95001 TGTCCTCAAA GAAGACACTC CACCTCCTC CCATTTCTCT CCTATTGCCT
95051 AAAAAATAAGA AGGATACGCG GCCTATGGCA AACCTTGGGC AGGCACGTGG
95101 GAGCTGAGCT CTTGCAAAGG GCAGATAGTT CCTCTGGTGA GAGAGAAAAG
95151 GAAGGGCCAG TGAGGAGTGA AGGAAGAGAC GAACAGAGAG CCCGAAAGGC
95201 TGAGAACGTT GTCTGGCTTC CTGAAAGGCT TAAGGGGTTA GCTCTGGAGG
95251 GTGAATCAAA AGCCTAGTT ATATTAAACA CACACGCACA CACGACGCA
95301 CACACATGCG CGCACACACA CACACACATA CACACAGTTG AAGGAGACCT
95351 GCAGTTTCCA AAAACAAGAG TTGTATTTTT TTTGTTTATA TCATGACCCA
95401 TAACAATCTC AAAAGAGAAA CAATCTCTTG TCTTCTTGT TTAGGCTTAG
95451 GAGAACCTGT GTTAAGTAAG CAGCAGCAGC GGAATCAAA CTCGACTCTT
95501 CCTACTGTCA TTCTCTCTAT TACACCACAA GGCATCAGAG GACCACTAGA
95551 GTCGCCTCCC TAGGGTTAGG GTTAGGGCAA GGTAAATGAA GTGAGTCAGC
95601 AAGGGCAGGA TAGGAACCTG TCTTTATTAA CATTTTGATA TTTTGTATT
95651 CATGGATTTG TTGCATTAAT TGCAACTTTT AAAAATCAT GCATTAATAA
95701 ATTATTGATC TTGATTACTG AGTTTTTAGG TGTACCCTTA AATGTTGCAC
95751 CTCTGACTTA CTAGTCTCAC CCTGATCCCT GTCCTGGATC TATGCCTGTC
95801 TGTTCTATAT CAGCCTCTTG CTTTGACCAT AAGAATAACT TCAGACCTTT

FIGURE 3, page 27 of 61

95851 AAGCATAGAG GAAATAGGAT TTCTGTCTCC CTTCCCCACC TTTGTGATAA
95901 TCTCAGCTTC TGCTTTTAAA GTCTATCTCC CAAGTAGTTT GCCTACTATG
95951 TCTCTCCCAA GGTCACCTAGG TTCTGTGAAA CTAGCAGCAG GCTAGATTGT
96001 CACATTAGCA CAAAGGATCC ACTATTCCCTG CAGCCGAGCT GGGACAAGCA
96051 CTTAGGCCCA CTGACTCCAA CCCTTCAATA GCCTGGGACC TACGTTGTCT
96101 CCAGGTGGTA TAAACAAGA ATTTCCCTTT TGA CTGGGAG AAAAAGGGAA
96151 GAACTCTAAA TTGGAAAACA GGTCTCTCG AATCTCACA GGTGGAATT
96201 TCTGACAACC CCTTTGGGAC CCACAATTCA ACACACCCCA AATGGGGACA
96251 GTAGCTAACA TGCAACCTGT AGGCTGTTCT GTCATCCAGT GCCACTGTGC
96301 TGCACACCAC CAGGGGGCAG CATCTCATT GGCTTCTATG TGCTGGAGC
96351 CCAGTGCAGT GTGCAACAC TGCAGCTTTG CTTTAGTGTA GTCCCTGATG
96401 GGTTCAGTCA AGAAAATGTC TATAGAATCA GCTAATCTCC CATGCAGTTA
96451 AGTCTCTAAT TGAAATATTT TCTCTGCTCA GCCCAGGGAC AGCAATCTTT
96501 CCTGGATTTG CTATTTACAA GGATCTCTAG AAATTATCCA CCAGAAATAT
96551 GGGCTTTCTC AGAGCTTGAG TGGACAGGGA ATTAAGGTGG AAGGCAGGCG
96601 GTTTTGACTG CATTGACCC AAGTCTGAA GAGCCAGCTC CTCTCTCTTC
96651 CTAATTATTA GAAGGTTTTG TTTGGACCCA GTGTTTCACG TGTATACAAT
96701 ACAAACCTCT CTCTTTTCTA CTTGGATCAA ATTTGTTCTC TCAAAATAAG
96751 ATTCCAGCA GTGAGAGAAG ACAAGACAGA GAGATCCAAC ATCTCTAAAG
96801 CATTGAATCA GATAACGAG CACTTGTTCT CTTAGTGCT GGGAACAGAT
96851 ACACTGTAA ATAAAATGAT TTTATAGATT CTCTCACTG CCTTTCCAAG
96901 AAGGGGATTT ATCAACTTCA GGGCACAGCA ATCATTTATT CCCAGACTAC
96951 TGGCATGCAT ATATATATAT ATTTACTTCT CTTGACTTAG AAAAAAGAGA
97001 GAATTGGAGT TGTGAATATT CCTGTCTCCC TCACCCAGC CCCCTTGAAG
97051 TGAGTCAGGA CAAACTTGGG GCCCAAATGG AGCTGTAAGT AACTGAGTCA
97101 CATGCAGAGA TGAAACCTTC ACAGACCCAC TGATATGGAG GTTGAAGATT
97151 AAATTTCCCT TTGAGAATAA CTGGGTAACA CTCATACAGA GACTACTTTC
97201 AAGAAGGCCA GATCCTCCCT CTAATGTATA GTGCAACGTT CCTAACCTC
97251 AGCCCACTCC GTCATACCCC CACTCACATG AATACACACA TAAGCAGTAA
97301 TATAAAGCAC TTCCCAACCAT AGGGCAGCAA AGAAGGAGGG AAATCTTTAT
97351 TATGGAAGAG TGGAAAGGAAG GAAGGGAAGG GAAGGGAAGG GAAGGGTAAG
97401 AGGAAGAATT CTTCAGGGTGA GCAGAGGAAT GACATGTTG GGGCATAATG
97451 AAGATAATTG AAGTGCAGAG TTTGTATGGA AAAATTTGAA AATATCAGGT
97501 GGCAGGCCAG GCATGGTAGC TCATGCCTGT AATCCCAGCA CTTTGGGAGG
97551 CCAAAGCAGG CGGATCACCT GAGGTCACGA GTTTGAGACT AGCCGGGCCA
97601 ACATGGCAAA ACCCATCTC GACTAAAAAT ACAAAAATTA GCTGGGTTTA
97651 GTGGCGCATG CCTGTAATCC CAGCTACTCG GGAGGCTGAG GCAGGAGAAT
97701 CATTTGAGCC TGGGAGGCAA AGGTGTCAGT GAGTCGAGAT CATGCTACTA
97751 CACTTCAGCC TGGGTGAGAG AGCTTTCTTT TTTTCTCTC ACAAAAAAAG
97801 AAAAGTTTCA GTTGCAGAGA TGGATGGATG GATGGATGGA TGGATGGATG
97851 GACGGATAGA TAGACATTAC AGAGAGTTTC CAATTCTTAG GATGAATTGG
97901 AATCCTTAAG TCTTTATTCT GTAAGAAAGG AAGGGGAGAA TAAATTTTGG
97951 TGATTTTAAA ATATTTTCTA CCCTGTAGAG CTACCCTACA AGGCATGAAA
98001 ACCTTAAAGC AAAAGGCATC TACTTTAAAA GAATAATGTC TAAAAAATTA
98051 GAAATTTCCCT CTTTTTGCCC TGACCTTTGG GAAACAGAGT GAGTGATCCT
98101 TTTGAGGTTT TTGGCACTGC CTTGCCTGTG ATCATATCCT GAACCCTAGG
98151 TCCATAATCA TGCAGTTACC TCAGATGTCC CTTTCCCTCT AGCCACAGGT
98201 AACACGCTCC CAGGCACCTG GAAAGTGGG TAATTAGGAA AGCAGAGGAG
98251 TACCCATGGG CTGTGATGCC CAGTTATAAA CCCAGACATT TCAGAATTAA
98301 CAGAAAGAGC ATCAAGTCCT CAAATGGGTC TACATCCATA AACATGTCCA
98351 GCAGTCAGCT CTTTACTGTC AGTAGAGACA AAATGTTCCCT ACACTTTCCC
98401 TAGGGGAAGC CACATCCTCA GTAGGTTATC TCTGATGAGT CCAGCTAGTC
98451 ACAGGTATGT AGAAGCTGCA TGCAGCAGAG GGCTCAAAGG AGGGTCCAGA
98501 ATAGATACCA AAGCAAAAGG GGAGTCTGTG CAGGTTCTCA CACGCACCCC
98551 GAAACACTCT TTTTGTTTAC AAAATAGATG GTGTAGGGTA GTTCCAAGAG
98601 ATCATTTAGC TCAGGTTCCCT GCCTCCATAA AATAAATAAG CCTTCCATAT
98651 TAGTTGTCTG TTGCTGTGTA GCAAATTGTC AGAAACGTAG AGGCTTAAAG
98701 CAATACCCAT TTATTATCTC GCAAGTTCTG TATCTCAGAA GTCCAGGCAG
98751 GCTTGACTGG GTTCTCTGTC CAAGTTCTCG TGAGACTGAA ATCAAGGTGT
98801 TGGCCAGGCT GGGATCTTAT CTGAGGCTC TGAGGACATA TACGCTTCCA
98851 ACCTTATTCA GGCCATCAGC AGAATCCCGT CTCTTGTGGC TTGAGGTTGG
98901 AGGTCCCGT TTCTTGCTG GCTGTCATCC AGGGACCACT CTTGCACCT
98951 ACAGGCTGCC TATGTTCTTA TTCACAAGAC ACCGTTTCATC TTCAAACCAA
99001 AGCAGCATGT AGAATCTTTC TTGTGGCTCG TATCTTCTG GCTTCCCTT
99051 CTTCTTTAGC CAGAGAAAGT TCTTTGCTTT TAAGCGTTCA TCGGATTCAA
99101 TCAGGCCCAC CTGGATAATG TCCCTATTTT AAAGGTAACGT GTGATACCGT
99151 ATAACATTTT AGGAGTGATA ACAGCACATT TACAGGTTCC AAGGATTGGG
99201 GCAGAACATC TTTGGGGGAA CATTTTAGAA ACTCTGCCTC CCCACTCACC
99251 CATAATCTCT TTAAGAACCA AATCTTGAAG CCTTTTTTTC CCAAGGCCT
99301 TTTTGAATAA GCACATTTAT ACCTAACTTC ATCAGACACC CACTTTGAGC
99351 AAACACTAGC ATGTGGCAAA ATAGGCTGTA AATCAATCAG AACTATTCTT

FIGURE 3, page 28 of 61

99401 TCCCACCACA ATCTTTCTCA AACACATTGG GAGAATCTGA CACTGTCAGT
99451 GGTATACCAG AGCAGACTCC TACCATCTCA CAAGAGCTGA CTGTAAATG
99501 TTTAGTAATT GTGGACATTG GTTGTAAAC TATTAGTAGC CTGAAATTGA
99551 CTATAGTGAG AGTATTTTCA CCATGGAAAG CAACCGTTCC AAATCAGGGT
99601 TTCTCTTTAT TCCTGGGAAG CTGGTTTATT AGCTCACCAC TGCTGTAGT
99651 CCTTTAGGGG TCATTACTTG ACCTCCTGTA GCATGCAGGA ATCCTCTCCA
99701 TGGCCTTTTT TATGCATGGA CATCATCCTA TTTTAAATA CCAGGAATGG
99751 GGTGATCACT CTCTTATAAG CTAGTTCATC TCCCTGATGG AATGGTATGT
99801 GGTAGAGTTG AAACCCACCT CCCTGGAAC TCCCACCAAC TTCCTTTGGA
99851 AGCAGCACTT GTGACAGCCC CAGAACCATT TGGAGTAAGT AGCATTTCTT
99901 CCAGGAGACA TCTCTCTCT GGATCCACAA ATCAATAGTT AGATGCAAAA
99951 TCTTTAGAGC CACACTGTTT GAATTCAATT CCCAGCTCTG CCACTTATTT
100001 AGTTATAACC TTAGGCAAGT CTCTTAACCT TTCTGGTCCT CTGGTTCTTC
100051 ATGTGTGGGA ATGGGGATAA AAATAGCACC TACCTCATAG GTTATTATGA
100101 ATATTAAATG AGATAATGTG TGCAGAGAAA ATAGCACCTG GTCTGGCCTC
100151 TACCTATCTA ACAGGTTAGT TGTGAGGATT AAATTACTTA ATATAAGCAA
100201 AATGCTTAGA GCTCTGCCTA GCACAAAATA AGCACTATGT AACTATTGGT
100251 AAGTTAATTT GAAATGTGGT TTCTAGATCT CTCATCATCC TAGTCACCCCT
100301 ACTCTGGATG TACTCCAAAG TCCCTCTCAA GATATAGTGT CAGAATTGAC
100351 CTAATTAGTC CACGATTTGA CTGAAACGCT AGACTTTGAC TCCAGCCCCC
100401 CATCCTTGAC TGGCACTAGC ATTCAAGCCG CTTCTCCTCT TTCCCTGGGT
100451 CTTTAAATAGA GTCAGAGCGA CTTCTCCAGG GGATCTTTTG GCCATGGACC
100501 AGTAGCATCC ACACACGCTG GGGCCTTGTT AAAAAGGCAG GCTCTCAGGC
100551 CCCACCCAGC CAGTACTGAA TCAGAATCCA CACATTAACA AGATGCTTGG
100601 GTGATTCATG TGCACATTAA AGTTTGAGAA GCACCGCTTT CAGGGACGAG
100651 ATGACACACT TATTTTAAAG AGAACGCCAA TTAGAGACCC TAAGCCTTCT
100701 CATGGAACAG GGGCCTTCCC CTCAGACCTT GGGAGAGGGG TCAGGGAAAT
100751 ATCAGTGTG GGTGTGTTG GACAGGTGGC GGTGGGGGGT TCAGTCCACG
100801 TTCAAAGAGC CAGAAACCTG GCAGGGGAAG AGATGGGGCA GTGACACCCA
100851 ACCGGAAAAA TAAAGGAAAC TACAAGAAGA ACCCAGCTAA GAGATGTGAG
100901 GCTTCTGAAA GCTCCCATGG AAAGGTTGCG AGCTCCTCCA CCTGCTCGGT
100951 CCAGTCAAGG CAGGTCAAGG AAGCTCTGTG AGTGTTAGCT GACCCGGAGC
101001 AGCAAGGATA CATTCAGAAG TGATGAAAGG GAACGCTTCT TGACAGGGTA
101051 AAGAGTCATT CAGTAGGAAT GAGACAGGAA GAGGTCACAG AGTCAGAAGC
101101 CCAGCCTGTA CTCAGAGATT ATTTCTGGCA TGGGAGGGCC GAAGGGTTAG
101151 GAGGCCACCT ACTCACAATA CAATACAGAG GCAGATCCAC TTATTACCTG
101201 CCTGTGCTGC TGGGATTTC A GTGTGAAAT TCTGTGCCTC CTCACTGTGG
101251 CTGCAGCTTG GGAATGACAT CCAGAGCTTA CCCACCTGCA TAAGAAATAA
101301 GCTATAGGTG TAATAGGGGG ACATAGGCTA AAATCCTAGC TCAGTGTCTT
101351 AATAGCTGTG CGACTGAGCA AGTTACTTAA CCTCTTTGAG CATCTGTTTT
101401 CTCATCTTTA AAATGGAAGT AATCATAATT GACCAGGCCC AGTGGCTCAC
101451 ACCTATAATC CCAGCACCTT GGAAGGCCGA GGCCAGTGGA TTGCTTGAGC
101501 CCAAGAGTTT GAGACCAGCA TGGTGACACC TCGTCTCTAG AAAAAATACA
101551 AAAATTGAAAT AGGCATGGTG GCAGGTGCCT GTAGTCTTAG CTA CTGCTGTA
101601 GGCTGAGGTG GGAAGATTAT ATGAGCCCGG GAGGTTGAGG CTGTGGTGAG
101651 CCAGATTGTG CCACTGCAAT CTAGCCTGGA GACAGAGTGA GACTGTGTCT
101701 CAAAAATAAA TAAATAAAAT AATAATATCT ATGTTAATAA AGCAGAAATA
101751 AGAATGAAAT AAGAGGCCCTG ACATGGTGAC TTATGCCCTG AATCCAGCA
101801 CTTTGGGAGG TCAAGGTGAG AGGATCACTT GAGCCCAGGA GTTCAAGATC
101851 AGCCTGGGCA ACTTAGTGAG GTCCCATCTC TACCAATAAT AATTTTTTAA
101901 AAATTAGCTG GGCATGGTGG CATGCACCCG TGGCCCCAGC TACTCAAGAG
101951 GCTGAGGCAG GAGGACGGCC TGAGCACAGG AGTTGAGGCT GCAGTGAGTC
102001 ATGATCACAC CACTGCACTC CGGCCTGGGT GACAGAGTGA GACCCTGTCT
102051 CAATAAATAA ATAAGAAGAA TGAAACAAGA AAGTTCTTCT TATGGTTCTC
102101 ATGGTGGTGA GCACAATGTA AGCATATATA TTATCTTAGA ATTCTTCCTT
102151 CCTGTATAAA GAAGGCCCTCC TCCAATGTAT TAATCATCTG TTCAACTAAT
102201 AAATGCTGCT TACTCCCACT TTCACTCTAA AGGAACCTCA TGGCTAAAGA
102251 GAACCTTCC CTTTGCAGC ACCCTGAGGA TCAGAGGCCT GATTTGAATG
102301 TCCTCGATGC AAAGGACTAT TTCAAAGGC CAGCCAGGCA GCCCAGACAT
102351 GTATTTCCTA ATCGTCTCCA GGTGTTTGA TAGAAGATCT CCTGGGAGCA
102401 GGTTCGCGCA CGAGCTCAGC CAGGTCTGTT CTGGGAACGC TGTGTGCATT
102451 GGCACCTCCC TTGGCAGAAA GCTTGGAGGA AAGGCAGGTG CAGGTCCTGG
102501 AGCCTCTGAC AGCATTACTG GCTCTAGGAG TAGCTGTCTA GGATAATCTG
102551 TCCCCATGAC CATTAAGTAA CTGCCACTGT GCGGGAAGAA GAACTGGAAA
102601 TGGGGGGCCC AAAAAAATCT GAAAACCTC ACTTGAACCA GTAAGTTATA
102651 CCCTGGGTTG CTGTTGGAGA GAGCTTCCTT GGAGTAGACA AATGTGGTAT
102701 GTTAAGTAAA CTGGGGATCT AGGTTTGATG ATACTGGGTC TGCAGCTTCT
102751 TTGTCCCACT GAAAACTCTC GGGCATTCCA TGAAAGTAGC CTCAAAATA
102801 TTTTGTCTCT TAATGACATA TTTTGTCTGC AAAAAGATGA GTGGATTCAT
102851 TTTACGAAGT CTCAAGTGTG TTAGAAATTC ACCATGAGTC ACTCAGCAAG
102901 TTATGTTTGA GGGCGTTCTG TATGCCAGGC ACTGTGCTGG GCACTGGGAC

FIGURE 3, page 29 of 61

102951 TACTGTAGCA AGTCAGATAG ACAAGAACTT GCTTGATCTT GGAAGTAAGC
103001 AGGGTGGGGT CTGGTTAGTC CTTGAATTGG AGACTGCCTG GAGATACTGG
103051 ATGCTGCAAG CTTTTGAAAA AAGACAAGTT CTCTGTACTT GCAGAGCTTA
103101 CATCCAGTAA CTAACAACT AACTTCAGGC TGTGTTGAGT GACTGAAAGT
103151 GGTGGAGCCA GGAGTCCTCT AGATAAGGTA GCCATGGAAG GCCTCTCCGA
103201 AGAGGTGATA AGTTTACTCA GAGACGCAAA CGATCAGGAT AAGCACAGAC
103251 CCCGGTGAAG AGCGTCCCAG GCAGAGGGGA TAGCAAGGGG ATTGCCCTTA
103301 GGTGGGAAAG GGCTTGATTT GAGGACTGGG AAGACCAGTG TGTCTAGGAC
103351 ACATAAGCAA GGGGAGGACG TTATGAACGA GGTCTGAGGG GTCAGCAGCG
103401 ACTGGATCAT GCAAGCTCCC ATAGGCCATG GTAAGGGCTC TGTGTGTACT
103451 ACAATTACAG GATGCATGAT AGGACCTGGG CTGCATTTT AATAGTTAAC
103501 CCTGGCTATA ATGTGGGGAA GGGATTGAAG AAAGAGGGCA AAGGCAGGAA
103551 CAGGAAAATC TCTTAGGAGG CTACTGCAAA GCCCAAGGGA GAGGTGATGG
103601 TGTTTTGTTG TTGTTGTTGT TTGTTTTGTT TTGCTTTGAG AAGGAGTCTC
103651 ACTCTGTCG CAGGCTGGA GTGCAATGGC ACAATCTCGG CTCCTGCAA
103701 CCTCCGCCTC TTGGGTTCAA GCAATTCTCC TGCCTCAGTC TCCCAAGTAG
103751 CTGGGATTAC AGGCATGCAC CACCATGGCT GGCTAATTTT TGTATTTTAA
103801 GTAGAGACAG AGTTTCCCCA TGTGGTCTAG GCTGGTCTTG AGCTCTGTAC
103851 CTCAGCGAT CCACCCGCCT CGGCCTTCCA AAGCACTGGG ATTACAGGTG
103901 TGAGGCACCG CGCTGGCCAA ATGATGGTGT TTTGATCTGG GTCCTAAAGG
103951 CAGAAGGAAG GGGGGTAGTA AATTAACGTG GCTGGGGAAG AGAGGGAGGC
104001 CTGAGAGTGA GGAAGAATG AGGGGTGATT CCAGGTTTAG GAAAACCTGGG
104051 CAATTTGTTA GATGATGGTG CCATTGACAG AAATGGGAAA GAACAAGTTT
104101 GGAAGAAAAA CTCGAATCT CGTGTTGAC TTGTATTAAA CTTAAGCCT
104151 CATTGTGAC TTGAGCAGAA GTAAGGACTT TCTCCAGTGT TCAAGAGCTG
104201 GAAGGGATTT TTCTAGCCTC CAGGCAAGGT AATACCATAA GTCCTAACAG
104251 TGATGCCCTC CCTGGGAATG ATCTCAATGG GAGAATCCTA TACCTGCCT
104301 CCTCCATCTA TTGCTTGCTC TGATGGTGGT TCTGGCTGGC TAACCTAAGT
104351 TACTCTTGCC ACTAGTTAAC GCCTGTCTTT ATTTCTCTTG TCCCCACCTA
104401 AGATGTCAAT CAAAACAGCA CGAGCCATGC TATGTACACAT GACATGTTGT
104451 CTGTCCAGCC CAGAGCTTGT TGCTGATGGG GGCACAGACT AGATTTTGAG
104501 AGAATCTCT CTGTTACCAC CCTTAACATT CCAACCCCTT CTAATAGCCC
104551 ATTTAGGATT TATCATACTG TTTTCATCAA ACCTTTCATG ACCTGATTTT
104601 TATTTCCAGC TTCAACCACC CCTTGGGTCA CCACCTGTAC TTATTGAGTT
104651 TCCCTAGTTT TCTGAATTAA TGACTGAAGA TGATAAGCTT CCCTTACATA
104701 TGACTGTCAA ACCACCAAAC TGGGATTGTT GTTACTCTTA GTGATAATGG
104751 TTGCTATTTA TGAACCTTTT AATAGGGAAC ACAAAACCTG CCCAGAAATT
104801 CATATAAATT ATTTTCATTTA AGAATCATCAG AAAGTAGGTG CTATTATTTG
104851 ACCTTACACG TGAGACTTGA AGAATTTAG AGCATTGCCC AAGGTCAACC
104901 AGCTAGTGAG TGCTGGAGGC GGGATTGAA TCCAGCTCAT CTGTTCCAT
104951 TACCTGGAAG AAGGAAGGCC AGAGCATCAT GGCCTTTCAC AAGTTGAAGA
105001 GCCACGGGCT TTCTACGTA GCCAGCCACG CTTTTCATG ACTGGGGTGG
105051 GTGTGGCAAG TGATGAGGGT TTGGAGTTCA TGTGGTGGGG TGGCAGGGAC
105101 CAGGTGTCTT GGTAACTGCT GTTGCAATCA CTTACAGGAG AAAGGACCAG
105151 ATCTGATTCT GCAGGATCAA CAATATGGAC ACTGCAGGCT CTGTAGACAT
105201 CCAAGCTCT AATGGTGAAT TGGGGAAGCT CAGGAGGGCA GGGAGGTTGT
105251 ACCCATTTAG AATGTAAAGA TTCTATTTT ATAAAAAGA AAAAAAGGAG
105301 ACTGAAGGCC TCACTCTCCT CCAACAAAGC CAGGCTGTGG GGTAGCAGAG
105351 TCTCAAAGGG TGCAGGCCCA TGGCCACTGC CCAGGGCTCC TGCTCAGGCC
105401 TCCTCACTCC CACAACCTGAG GGGAGACCCA GTTCCACACC CACCCACCTA
105451 GCAGTGCTC ACACCCACCG GGAGAGGTCT AAACATCTTC CCTGGGAAAT
105501 GGTCCCAAAA TGTCCTGCA GTAAGCAACC ATCTGGAGAG GCCCAGGTCT
105551 ACATCTGTTT TTAAGCTCC AATAAATAA TAAATGAAGG AAGAAAAAAA
105601 GAAGAAGAAA TGCAGAACAG GGTGACTAAA ATTGGCATGT ATTTTAAAT
105651 GTTTATATTA ACAAACCTAAC ACCTTTTAAC ATGAAAAGCA ATATAATTGT
105701 GCTAGCCACA AAATCATCGT AGGACTGAGA AAGGAATCGT GATTCTGAGA
105751 GCCCTAGAGT TAATGTGATC CAGCTGGCTC ATCCCTGTGA CTGCAGAAGC
105801 CTGTTTGGAG ATAGTGTCAG TAGCTTTTCA GGCCCTGTGT GAATTGCCAG
105851 AATGTGTGAC ATGAGCCAAA TTTCCTCCCA GCATCCCCGC CGCCGCCACC
105901 ACCACCCCG ACCCAACCCT CCCGCCGGCT CCCATAGAAT AGTCACTGCC
105951 ATACAGAAAA AGAGAAAGTT TACTATTCT GGGCAAGATT TCCACAAACC
106001 AGTTTGTCCC TTTCTGCTTT CATGAAATAA ACCATTGGA TCAACGTCAG
106051 CTGATTGCAA AAATTTTCCC TTGTCTCAA AGCAAGACTG ATAAGGAAGC
106101 AAACATGGGA GGACCTTAGT GGCCGAGCCT TTATGTGTAT GTTATTTTAT
106151 TGCTCTCATA ACTGCCCTGG GATGCTGTAA GCATGATTCA TCCTGTTTGT
106201 TTATCAGTTA AATTATGTAT CCAAGATTAC ACAGCCTATC CAGGATTAGA
106251 ACTCAGAGCC CTGCGCTGTG AAGCTTGAGC TCTTTCTTTT CAGTCTTCAA
106301 ATATGATCAT GCCATGAAGC AGCACAAGC CCAGGAGGAG CCCAGTGAGG
106351 CTGGAGGGGT CCACTGGCAG CCACTCTCCT CCGTGCCCTT GTGGTGTGG
106401 GGCAAACTTG GATCTTTCTG AATCTTTTAA CTGTTTCTTT CTCTTCCCGT
106451 TTTTGTCTGC TGCTGACTT GTCCTACACT CTACTCCTTG CTTATGATAC

FIGURE 3, page 30 of 61

106501 TTATTTTTC ATCCACAGCA AAACAATTCA CATCAAGGTA ATTGATGATG
106551 AGGCATATGA GAAAAACAAG AATTACTTCA TTGAGATGAT GGGCCCCCGC
106601 ATGGTGGATA TGAGTTTTC GAAAGGTGTA GTACCCGTGC CTCACACTA
106651 AACTAACAT TCTTCTCTCC TCTTCTGTTT CTTCCTCTCC AACCATTG
106701 TCTCTCTCTC CTCTGTCTCT CCACCTCTCT GGTTCCTTT CCCTTGCTC
106751 CTCTCTTGCT CTCTCTCTG CTCTCTTTT ACTCCTCCCT CTCCTCTGTC
106801 CTCTCTCTGC CCCAGCTCT GTCTAACAC CTGCCAGCCT GACACATGGC
106851 ATCCATACGA GGGATGCTCA AGACCGATGG TAATTGTTCT GGGATAAGGA
106901 AATGAGTATG GGGAAAGAAA GAGCCAAAAT GCTGGAGTAT CATGTGCGGC
106951 TCTTGGCTTC TCCAGAATGG CTGGGCATAA AGGGGGGAAA AGGGACCACA
107001 TAGCCCAGCA CAGACAGAA GAGCAGCACT GAGAAACAGG CTTTCAGCAC
107051 AAATTTCAT GGGGCAGTTA TTCTCAGGGC TAAACTTAGA GTCCCAGGAA
107101 GTTGAGAATC AATGTATTTG GATTACAGTT CATTCCCCTC CCAAAGCAG
107151 GCTTTAGGAG CCACCTTATC TGCCATGTTG CTACTATCAA GACTTGTTTC
107201 TCCTCCTGAC CTTGAGGAAG CTGAAAGTAC AGGTTTGAGT TCCAGATCTA
107251 GGTCAAATAT CCATTTGTCT TCCTATGTTT TTCTATTAA GAACACCCAG
107301 GTGTGGAGGC AGAGAGTTAG AATAGTGGTG GAGATCATCC TGACCCAAAT
107351 GGAAGCTTCC CCAAGAGGTC CATGGGGCTT CTCAGAGTGG ATGGAATCTT
107401 TGCCTTCAAC TTCAATGACC CCATACATCC CATGGCCTCC AATAGACAAG
107451 TCAAGAAGTC CTTTCTGAA TAGATCATAC TGTGGAGCAG GGAGCTGCCA
107501 GTACTGAGGG CAATGTTCTT TCCCCTTCCA AGCTGTCCCT CATGCCCTCC
107551 AGTACATGCC TGTGTGACA GAGCACCCCA ATCCCATCCC ACAGCAGAGT
107601 TCCTGCAGCA GAGAAACAGG CTCACACCTT GTAGACAGCC CTGGGGTCCC
107651 ATATCTAGGG CCAACAGAAA TATTTCCAAA AAAATGCCTC TTGACAATCA
107701 ATGAGCTTTC TCTTTGTCC GCTGAGCAAG GTATAAAAAG ATGTCAAAAG
107751 AAGTACCCAA AAAGGTAATA AAAATGTACA GTCGTGCATC ACTTAGCAAT
107801 AAGGATACAT TCTGAGGAAG GTGTCCTTAA GCAATTTTGT CATCGTGGGA
107851 AAATTATAGA GTGTACTTTC ACAAACCTAG ATGGTGTAGC CTACAACACA
107901 CCTGGACTAT GTGGGCCTAT TGCTCCTAGG CTACAAACCT GTACAGCATG
107951 TGCTTGTACT GAATATTGCA GGCAACTGTA GCACAATGGT ATTTGTGTAT
108001 CTAACACAT CTAGACATAG AAAAGGCACA GTAAAAATAT CGTAGTATAT
108051 AGCCTTATGG GACCACTATT GTAGATGTGG TCTGTCTATT AGCAAAACGT
108101 TTTTATGTAG CATGTGACTG TACTTGTAAG GTACACACAC CACAAATGCA
108151 CAGCAAGTCC TGTGCCCTAC AAGCCCCCTT GGTTCAGTCT ACTACATTAT
108201 AAATGGCAAA GCCGAGCAGC CCCACAGAAG GTAGCAGGAA CATCAGAGGA
108251 TCTGAAGAGA CATTTAGGTA AATGCTCTTT ACCCTTTAGA GCATTTAGTT
108301 CTTAGGCCTC CCCTCCCCCA ATCTCCCCCC CGCCCCCGC CAAAAAGAAA
108351 AAGAAAAAGA AAGCAGAAAA TTACAATTCT GGCTCACTAG TAGGACCTGC
108401 TAGCCACCAT TGTGATTCCA TGAAGGACCA GAAGAAACCA TATAGGAAGA
108451 ATCAGGCCCA CACGGCAACC TCTCCACATG ACAAAGAGCC AGTCTTTGGA
108501 GGGCAGTGAA TTTCAAGGAA AGTTTCTTTC CCTGGGTGAC TTGTTTTTAA
108551 AAGATGTTAT GTTTTGTGTA GATACCCAGA GATGAACAGA AACTTCCATC
108601 ACCTTGTGCC CCAGACCCAT GATAATTAC ATTGAGGAAA CCAGTTTGG
108651 AACACATGCT CTTAAGTGA TAGAAGCCCA AAGGTGATT AGAATTGAT
108701 GATTACATC ATTTTCTTCA CATTTTCCCA GAAATGCATC AGCTGTAAAT
108751 AGTAAAGGAT TCCTATGTAA TATGTGTGTT AATACATATT TATTTTAGTT
108801 CCCACCCTG AAGCCCTATG AGATAAAGAA TGAGAAAGAT CACACAATTC
108851 TACCTCCCTT TCTCTCTCT CTCTCTCTCT TTCTCTTCT CTCTCACTCT
108901 CTCTCTCTCT CTCTCTTCTC TTCTCTGTC TGGTTTTCTC TCCTCATAAA
108951 TACTTTCTTT TTAATAATTT CTTTCTGAAA CTCACAATGG AAGTGAGTAT
109001 AGACATAAAG AAGGGACACA AGCCCTGGGT TCTGTTGACA TATTCCTCTG
109051 TGTGGGAAGA CCTGGGTTA TTCCAGTGG GTTAGTAGTT TACCTGTTGC
109101 CCAGAGCAAT GCCACTGTTA TCATGTGACA CCCAGTGGAA TGTGCTGCCT
109151 GACTCACTTC CTACTAATG TTGGCAAGGT CTAAAATGAC TCCTCCTCAC
109201 CATTACCCGC CTTCTGCCTT CTCTCCCTT TCTGTCTTTC TGGCTCCCTT
109251 CCTTTGCCCA CCTTCTCTTG CCTCTGGCT CCTGCCCCC TCACCGTAA
109301 GAACAACAT GACCAAGAAG ACAAGAAAA CTAAGACCAT TTATTACCTG
109351 AGAACAACAC AATCCACCAT GGTCTGTGTT AAAGCCACCA TGGTGGGACT
109401 GGACTGCATG TGCCAGGAAT GACGGGGAAT GATTTTAAAG GCTGTGCTCC
109451 AGGTGACCAA CCAATCTACC GACCCAGTCG ACACACTCTC TCTCTGTTG
109501 TCCCTACAGG AAAACCATAA GGGTTAAAT AGTAGATGAG GAGGAATACG
109551 AAAGCAAGA GAATTTCTTC ATTGCCCTTG GTGAACCGAA ATGGATGGAA
109601 CGTGGAATAT CAGGTGTGAG ATTCTTTAAA AACAAAACAA CAAAAAAGCA
109651 GAAAGAAAAA TTAACAAAA CTGAAAAACA ACAACAAAA AGAAAAAGCA
109701 GCTATATTTT TTGCTCCCTC CTTTCTTCC CTCTCTCTC TTTCTTTT
109751 TGACCAATGG ATTTTCTTAT TCTTTCCCT CCTGTATTCT CGCTCTCACC
109801 CTGTTTCGGT ATCATCTCTG CTTCTTAGC CTAGCTTAT TCCAAATTC
109851 TCCTTTACCG CTTCTGGGC AGCACTGCAG CCTCAACTCC TCATTACCCT
109901 AATGAGTTAT TTCCCTGTTT TGCTACAATT TTCAATTATT CAATTGCCAT
109951 GGGCCCTGCT ACTCTCCCC ACCCCACCCC TACACTGTAA CCTGTAAATG
110001 TGAAAATTCC TTGGTGGGTG GGGAGGAGAA GAAAAAAG GAATGTGATG

FIGURE 3, page 31 of 61

110051 CGATGCATGC CTGTGCCCTC TCCTGCCTTC CTCCCCTGCC ACCCCTCACT
110101 CTTTAGCCTG GATTGAATGT GGGGGGGTCT GGGATGGGGG TTGGGGCCTG
110151 GGTTCGAATG ATGCTTTGAC AGTTTCTGCG TGCATTCCCC AACTTCCTTT
110201 GAACGCTTGG CAGGTTATTC ACTTGTGGAG TGGCCCATAG GCCCCTCTGC
110251 CCTTCGAGGA GGTAAAGTGA TTTTCTGGCT GTTTCACAGT TGGGCAGACC
110301 GTGGCATGGG AAAGTGATAC AATTGTCAGA AGCCACGGCT TCTGAGAGCT
110351 CTGAGAGAGA GAGTTGACTT CTGGGGTAAT CATGCAATCT GGAATTCTGA
110401 GCTATTCTTC CTCCTCTGGG CATCCCACCC CATGCCATTC TATGTTCCCTA
110451 GCCCAGGTTT GGGTGCCCTCA TTCAGGCTAC TTTGGGACAA TGCAACCTCT
110501 AAAGCAGAAA ATTGAGAGTT CCTGAAGGGA AGGAAATAGT TCCAGGTATG
110551 AAAATTCCTG TACCAGGGG CCCCAGAAAA GGACTGACAT TGGGCAGGCC
110601 TGGAGTGGTG ACTTGTGGAT TTTCCAACAG AAGAGACTCT AAATGATGCA
110651 GTTGGTGCTG ATCCCTGACA GACAGGTGTT GGAAAGGTCA CAGATGTCTG
110701 CCTTTGCTTG GCATCTGCAA GAGAAAAGTAC CGCCAGATC CCAAGATAGC
110751 CCTCATCCCA CACTAGAGAA GTGGCCTCAT CTCCTGCTTT CCTCAGGACC
110801 TGCATCTGAG AATACCTGCC AGGGGCTCAT CCCTAAAGGA CTGATTATGT
110851 TGCAACCAGG GTAGAAGTAA GGAAGGATTT CTTCCCTTGA AGAAAATGAT
110901 TGGAAAGCCAC TACTTTGAAT GGCTTCCAAT CATTTGGAGG CATAGATGTG
110951 GGAATGGGTT AGGGTGCTCC TGGGAAATAA CAAGAGGACG TTCACACTCC
111001 CATTAGAGAG AGATATGCTG CTGGGAGCCT CCTAGCAAAT GAAGCAGTGA
111051 AATCCACCTG TTTGTCAAAA AGGGGTGATC ATACTGCAAT TAGTTCATAT
111101 TCATGTGACA AAGAGCAGCA TAAACTTTTC CACACGAGGA CAGAGCTAAG
111151 AGATTACAGCA ACAACATTCC CAAAGGATTC TCTACAGGCC TTCTCAGTGT
111201 GATTGGTCTG TTCTCATTGT CTGCTGGGGA CTCTCCTGCA GAGCTGACCA
111251 CTTCTGTGCC TGCCTGTGGT TGGACACACC TGATGCTCTA GGGGCAGAAC
111301 TCCTCTCCTT CTTCACTGCT GGTCTCTCTC GTCAACCTC AATAAACCGT
111351 TGCCCTCAGC CTGACTGCCA AAAAGTGCTG GAAGAAAGAA ATTATCTCTG
111401 GTTCTATTGT TTCCACATT GTATTCTTGC CCAACTTCCA GTTCTTGCCA
111451 CCAACAATAT TCTCAGAGGT TGCCTCAGCA CCTGCCCTAC CTCATTCCCA
111501 CCTCCCTTGA GCATTTATTC CATGTATTCA TAATTGGTTG GAAGCAGCAG
111551 ATACCCAAGG CCAATTGTAA GTCACCTTCA TCAGTTTCCA CAGTCCAAGC
111601 TACTTAAATG CAAACGAAAG CAGCACATGT ACAGCGTACA GGAAGGAAGG
111651 CAGTGGTTCC AGACAAGAGG AAGAGATTGG AAGTCCATAC ATGCCCTTAT
111701 TCCACCAGTA AAAAGGCTCT TCTCTTATGC CTCCCTTAAA ACCTCTACCA
111751 ACAGCAGGAC AGAGAGTGAC CCAAGATAAG TCTTCAAGAG ACCTAACCAG
111801 ATGCAAAATG CTTTGGCTAA TCCCCATTTA AGGACATCTT CCTGTTTTCG
111851 ACAGATTCTT TGCCCAAGGA AATGTCAGCA ATGCCCTCGT GGAGGGAGTA
111901 GGTGAGAAGA CAAGGATTTT AGCAAGCTAT CTGTGTGGTG TGCCCCCAGA
111951 TCTCCCCAGT GACCCGAGATG CCAAGATGAA GAGTGCCAAG AAGAAATTGG
112001 TCAATTTTTC AGCTGCCTAT TTTATTGTCT ATGTTTTCTA GCGGGTAAAT
112051 TTCCAGTTTC TTCAGTACTT CCCGTATTTT GACATTAGAC CATAAGGTGA
112101 AAGGTCATAA AACCTGATTG TCTAGACTCA GAAGCAAATG GAAACCCATC
112151 CAAATTTCCA GAATTCCTG CTGTTCTCAG AGTGAGAAAC AGAACAGTGG
112201 AAATTGCTTT TACTATAC TACTGCATGG GAGAGTCTGA AACATTGAGA
112251 ATGGCATAGT CTTTGCATGG TCAAAATGAC AATTGCATTA AAAAAATGAG
112301 AGACTGGATT TGAAATAGGA GACTCTATTT TTGGCAAACA AAACAGACTT
112351 CAGAGTTGAG ATTAAGAGCT CTGGATGAGC TGGGGGATGG AAAAAAGGGA
112401 AGGAAAAAAG GGAGACTGAA TAGGAAACAC AGTTGCTCTG GAGCTAGAA
112451 GTGGACTTCC GAGAGCAACA CTGAGCAACA TAATCAAGAC TGTGGGCCCT
112501 GGGCCTGGAC ATTGGAAGCC TTCGGATAGA AAGGAAAGCT CTCTGTCTCT
112551 CTCTCTCTCT CTGAAGAATG GGGCCTGTTT GGTCCTCCTT TTTGACAAC
112601 CGTGGGCTCA TCTTGACAAG CTGCCAGAT GCTTCTTAAT TACTCACAGT
112651 CCTATGCTCT TTCCAGCTTG TCCCTGGGGT GTCTGAGCAG GAATAAATGA
112701 CTCTCACCTG ACCCAGGGGA TCAATACAGG GGAAAGTTCA GCTCCAGCTT
112751 CTCTCATGAG CAGCAGCAGG AAAAACACCC TCGAGGTATT GTGTCAGTCA
112801 AAGCTGGCCT ACCAGGTCT TGCTGACCCA TCTATAACTG CTGAGCAGAA
112851 AGTCTTGGAT TCATGGAGAC AATGACCAGA GAATGATGGA ATTCCAGCCA
112901 ACTGCAGGCC TTCTCACTAC TCTAGGGATG GGCCAGATGT TCGGTGGCAT
112951 GTATGAGTGA AAACAGGGC ATCAGGGACC TTTCTGGAAG AGCTGCCTTT
113001 GTCTGACCCA CAGTGTTTCA TTTATGTGCT GGGATCTCTG ATCTCCCCTG
113051 GAACTTGGGG GAAAGCTCTT CACGCAAACT CCCGGAAGGA GCAGAATAAA
113101 CAAGCTCTTG CCTATCTATC TATCTATCTA TCTATCTATC TATCTATCTA
113151 TCTATCTACC TATCTGCCTA TCTATATCTA TCTATCTCAA TGATGTGAGG
113201 AAAGCCATTG ATCCATTAA CTTTGAATT CTACATGGGA GATACCTAAA
113251 AAAGTGAAC CTCTGTTTGA TGTATCATGC AGACTCTGGA TCCACATATA
113301 TCTCAGTGGC TGTGAATATA GGATGATTGA TCACAGGCCT GAGTTGCATT
113351 CCTACAGATT CTTAGGAAAA AAATTGATTC ACAGACATGT CCCCCCTGGT
113401 TCCCCACAAA CACACACTCC TTCCTCAGCA ATCTCTATCA GTCACCAACT
113451 ACACGTTGAA TATGTGGCAA GCTCTTCCCA GACCTTTATC TGAGAGCCAA
113501 GGAGTGAGGG GCTGTACTAA GATATCATAG AAATGAAAAT GTGGTGTGTC
113551 ACAAGTTTCC TTAATTCTTA GATCTTAAAC TCTAAGAGGG TTCAGCATAA

FIGURE 3, page 32 of 61

113601 GTACAAATTC AAGGGCTAGA GACAACCTGT ATTGGGTGTG TCTTTAACTC
113651 AGTTTCCCAA TCCACATAGG GACCTTGCAT TTGTCATCTC TCATCTATGT
113701 ATAGCTGTTG GTATGACAGT TTCTCTGTTC CAGAATACCT GAACTCTGAC
113751 TTAGCCTGTC CTTTCTGAAA CAGAAAAATC ACCCAACCAG AGATCTATGA
113801 GATCTATGGA AAAGACAGTT GCCAAAATAG ACAGCAAACA GCCAAACTTA
113851 ATTGAACACT ACCACATGCA GGGACTTTGC TAAGCAGAGG TGATACAAAA
113901 TGGGAGGAGC CCATAGCCCT AACTTCCAGG ATATATCTAC GGTAAAGACA
113951 AACCATTCAA GGAAACATT CTGCAGGACT TACCTTTTTG CTAAGTCATT
114001 CTTTTAGGGG AAATCAAAGT TCTAGTCAAC GTGGCAGCTA GGAAGGCATT
114051 TGTGGTGATG GAAACCTTAT GAGCACTGAG AAGCTGAGCA TGAGTTCAGC
114101 TAAGTCGTTA GGGATGGAAG ACATAGACCT GGGCACTGTT CCACTCTTGC
114151 ACAATGCTAC CCATTTCCTT GAGCTCCCAT TCAAGCCCA TGGTCATTTT
114201 TGCCACTCAT AAGTTAGCTA CTCTGGCAGG GTTGCAACTT ACACAGTTTT
114251 CATGATAACT GGATTCTCAC TCCTTTTTTT ACAGAATGGA TGTGATAACC
114301 TGGTATCCTA CACAGTCATG AGTGACCAAC CTACCCATTT GGTTCCCCAT
114351 CCTCATTTCT CCATTCTCTAG CCTAGGGTA GCCGGGAAAG CATAGGAGCA
114401 AATGCCCTTA CCAGGGCCCT GGTGCTCAGC AGCCTCTCCG GCTGCTCACA
114451 CCTCTTGCTG CTGCTCTGTG CATGCTCCAA AGGCTGCTTT TTGCGTATGG
114501 CTGCTGAGCT CTCACCTACT AAGCTCTCTG CTTTCCTTAT GCTGCCAGCA
114551 ACCGACAAAC CTGGTGATAC TTTCAAGATG GGACATTAAT GCTCTTTCCT
114601 TTTCTTTCTT CCATTTTCTT GGTATCCATT TGCAAACAGC GCTCCTGTTA
114651 TCTCCAGGTA AGAGGTGTCT TGTCCTCCCTC TTTTCTTTCC ACTTCTTGCC
114701 AGTGCCATTA TTTGGTTTAA GACCAATGTC CTTTGATTTA TTGAATAAGA
114751 ACTGCAGGCT CAGGTTAACC TGACAATTTT TCCCAAGGAC TGGGAGATTT
114801 ATTTTCCAC ATGAAGCAAT TATGAGAAAG CAATTGTGAG GAAGGCAATT
114851 CCTTGAGCAT CACTTCTGTC TGGGGACGTG GGTAAAGGCA TAGCTGATCC
114901 TCTCTGGGAC CAGGAAGAGA AATTAAGCTT AACAAGGAGA TGGTGGGTCA
114951 TAGACTTCTC CTGAGTCTTA ATTCACTGCG CATCTCATGT TGTGGGGGAA
115001 GAGACAGTGA GATTCAAGC TGGAATCTCC TAATATAATT GTGACAGGAT
115051 TTGAAAAAAA AATACTTTAA TCCCAAGGGA TCCAGGAAAT AACCAAACCT
115101 GTTGTGAGAA TAGGAAATGC AATTTTAAA GAATCTGGAA TTTTACCAGT
115151 CCTGGAGGCT TTCCATCTCA TCACAGCTGA GACTTAAATT GCTAGAATTT
115201 TGGTTCATTT GTCATTGACC CTTAAAGTCC TATGTGCCGT GAACAAGATG
115251 AATTAGGATG GGGGATTGGG GCAGTGTTCT GGCTGGAAAT ATAAATTTTA
115301 GAGAATTTAT TTTGAAGAGA TTCTCATGCA GAATCTAGGT GCTATAGAGG
115351 ACGTACAGCT ACTTTGAGAG TATGCTTGCA TGAGTGGAAA CCAATCATAA
115401 ACAACATTCA ACTTCATGAG CAGATATGAA AGCATTTCAT GCATATCTAG
115451 CAATACTATA ACTCTTTGTG CAAGCAGAGT GGCTACACA AGACAGTTTC
115501 AATATATTTT AAAAGAACGT CTTACATTTT ATCAGTCCTT TGAACACAGA
115551 AAAAAATGTT AAGGCCACTT AAGAGGCAAA ACATCTTACA GAGTTCATTG
115601 ATATTCAAAG TCACCTACAG GCTACATCTT GGGTTCAGGA AGGGGCGGTG
115651 TACATAGTAA GGACATACGC CTTCTGGGAG CCTTAAACAA ACAAAAAAAA
115701 TGTAGGTAAC TCCTACATTT TTCTTTTGTG GAAAAACAC AGTTACTCCA
115751 GCTTCCCTGG CTTTCTGCTT CTTTTTATA CCAACAAAAT AAGGGCTATC
115801 CTCAACCCCT TGTTCTTCAT TCTTCTCCCA GGGTATTGAT TTCATAACAT
115851 TGGGTTTTTC TTCTCTACTT CACTCATCCT CTTGCCTGTG AAGGTATGTA
115901 AGGCTTCTTT GTTCCAACCT TTTCTCCAC CCGCCCCCCC TCACATAAAT
115951 GCATAACAAA GATTGTGATT TAATTAAAGT TTCTTTCTAC TTTTAACATA
116001 TTTGCAACAA TCAATAGAAG CTAAATGGG AAAAAGGAAA TGTTCCTTTT
116051 CCTAGCTCTT TCAATCTGTA AGCCTTTAAT TTAGGAGCGC TGATTAGCCT
116101 TTCAATTCGT TGGAAATCTC AAATACTGGT TTTAATTTTC CTAGGTGGAC
116151 AGAGACAGAG GGAATATGTT CATCTGAGC TAACCACCCC CCCACCCCA
116201 AGCTCAGGCG CCTTGCAGGA AGAGCACTAG CTACATCACT CTGCAGAGTG
116251 TTCACAACAT CCTATTCTTG TCTGGCCTGG CAAGCTCTTT GTCCTTCCAA
116301 TATTGTGTTA ATCTTCCATC CTATTCAAT TCTATCTTTC TCTCCCTCC
116351 CAGCCTCTCT TCCTGTTTCT AGAACTGAGA GTTTATTTAG TCAGTCTGAA
116401 TATCTAGATC ACCTGCCATT TATTCTCTTT ACTTGAAATT CTGAGGAGTC
116451 ACATAAACAA GATATCAGAA TCACTATGGT CCTCTAAATT GAAGACTTAT
116501 AATTCTCTCA AGAAATTAAC AACATTTGAA TTTAAAGGAA AGATCATGAC
116551 AAAAAATAGAA AAAGGCAGGA ATTATTGCCA AACCGAGAAA CTAGAACTA
116601 GAATTAACCT AAAGGCATGT GACTCAATCA ATTAACAAAT ATATACAGAG
116651 AGCCTCTGTG GGAAGTGGG AGATCCAAAG ATAGAGGATT GGTATTGTGT
116701 CAAAGGGATT TTTGCAGAAA GCTAGATGGA AAAACTGACT GTCACCACAG
116751 AGGTGGACAG GTCAGTAAGT AGATCAATAT CCTGCCAGAT GGATATAGTG
116801 CTAGATTGAT AGGTAGACAA GGGGTTAGAC AGGTACATTT ATATGTCACT
116851 GGAGAGCTCA TTATATTGGT ATAAAGTTAT TGTGTACAT GTAAAGTATG
116901 ACATGGGGGA ATTGGGGAGG AAGGAGTGGA ATAATACTGT CGCTGCTAAG
116951 ATAGGCATTG TGATATGGTG CTTAAACCTG CAAGTAAAGG AAAAGAGTAT
117001 GGAATCTGTG TGTCTTTTTC TAAGGGCTTT TTCCCAGAGT AGCTTGACAGT
117051 CTGGCTTCTA GGGTTGCTGG CCTATAGCCA GAACCCTAGA TTCACCCAGA
117101 TTTACCTTCA GAATTAACCTA ATCAGAGACT CAAATTCAAT AGACTAAATG

FIGURE 3, page 33 of 61

117151 AAGTCAGGCT GCTAGAGGAT GTCTGCTGAC TTGGACATAT GCAGAAAGAC
117201 ATGGATCCTT GAGAAAACAT TGTTTCCAAA AGTGGCCACC AGCACTAGAG
117251 GAAGGACAGC ACCACGGACA GCTCCAGAGC ATTTTAGGAT TGCCCTCTGT
117301 GTTTGGTGCC CGAACACTGA GCAAAACAGC GAACTCAGGA AGTCTCCACA
117351 CACTCTCATA CCATCTTCAT GCAGTCCAAC TAAGAAAAAT CTACATAAAA
117401 ATATAAGGCT GTCTGCTTGG TAATTTAAAC CCTTGGCTTA TAGTCTTTTC
117451 AGTGAATTTT TTTCCCTTGCA AACTCGAGAG TTGGAGTCTC ACGACTGCCC
117501 TTGCTTCACC AATTTCCCCAG CTAGAGACAA AAGACCTTCT TGGCCTCTGA
117551 CCCATTTTGT CCTTGAGATT ATCCAAGGAC TACAGGATTC CCCTAGGAGG
117601 TTTACTGTGT GGAATGAAAG CAATTAAGGA GCTGAATAAA AGAAATAATT
117651 GCATGTGAGA ATGTGGACTT GGATGGGAAG ATGTTTAAAT GAGCTCTGAA
117701 AGAAACAAGC TGCCAAGAGC AATTTTCTAA TTAAGGGGA ATAAAAAGAT
117751 TCAATCTCTA TTTCACTCTA ATCCAGAAAA CATGTCTTCA TGGAGAAGTG
117801 CTCTTAAAT GGACTCATCA GCCAAAGTGG AAAAACAAAA AACAAAAAAA
117851 CTGTTCAAC TGAGAAGGGA CCATGGTAA ATGAGTCAAG ATGCTGTGAA
117901 ACCAGTAGAC ATTTCTTTTG AATAAATGTA CTCTGCACC TTCAAGAACT
117951 CTTACAGGAA GTGGTTGAAC AAACAGGCC AAAAGTTCAA AATAGTTCAA
118001 GGTCAAAACA CTTGCCCTTT CTTCACAGT CCCCAACATC TCACTGAGTG
118051 TCTTGAGAAC TTTACTTGAT GCTATTTCTC AGGAGATGTT TAGGTCAGGT
118101 TGTCCACCCA GTGTATAAAG AGAAAGAGGA ACGCTTATCC CAGTCTGCAA
118151 GGCACATTCT CATGGTCTGG TTATAAAGTG TTTAGTACTT CATAAAAAAG
118201 GCACTAAAAA TATATATAAA CTCCCCATTC CCAAGAGTTA TTTGCTTTGT
118251 ACCCACTGCC CATGCCTAAT ACTCTGAGCT GTATCCTTCC AGGGAATGGA
118301 AAAGGTGTTA AAGCGAGTCT GATTTTGT TTGTTGCAGAT GTGACAGACA
118351 GGAAGCTGAC TATGGAAGAA GAGGAGGCCA AGAGGATAGC AGAGATGGGA
118401 AAGCCAGTAT TGGGTGAACA CCCCAAACTA GAAGTCATCA TTGAAGAGTC
118451 CTATGAGTTC AAGGTCAGGC AAACAGTGAG GTCTAATTGA ATAATAAATA
118501 AATTAAAGTG GGAGGCAGAA GACCTGGGGT GTTTTTTCC ACTTTCACTA
118551 GTGAATATGT GAAGTTGAAA CTGAACAAAT CACTTACCCA CCCAGGTCT
118601 CAGTTTCCCC ATTTGTAACA TGAAACAAAT AGTGCTGACC ATTTGTATGC
118651 TAGGAATATT GTTAGGAAAC ATAATATAGA ATGTGAAATA AGTGGACTAG
118701 AAAGTCTGA GATGTATTAT CATATTGTT TAACTGTGTT TTTAAAGCAA
118751 AAATATTTAA ACTCACTACT ACAGGGCAAG ATATATTAAC ATCATTATTA
118801 TTATTCATTA TTGTATTATT CTAAATAGCC AATTTCAAAA GTCACAACCA
118851 GGCCAGGCAG TGAGGGACTC ACGCCTGTAA TCTCAGCACT TTGAGAGGCC
118901 GAGATGGAAG GGTCACCTAT ACCTAGGAAT TTGAGACCAG CCTGGGCAAC
118951 ATAGGGAGAC TCCATCTCTA TAAAAAATAA AACAAAATAA AAATCAGCTC
119001 AGTGTGGTTG TACATGCCTG TGGTCCAGC TACTCAGGAG GCTGAGGTGG
119051 GAGGATGGCT TGAGCCCAGG AGGTTGAGGT TGCAATGAGC CATGATTGCA
119101 CCACTGCACT CCAGCCTGGG TGACAAAGTG AGACCCGTGC TCAAAACAAA
119151 CAAAACAAAA AGATTACAAC CAAAACAAAA GGGAAATAGA AGGATTGCCT
119201 CAAAAGAGAT CGCCCAAGGC CATTCCATGC GTAACGTGCA GAACACCTTG
119251 GAGACAGGGC ATCTTTTATT CCTTTGAAGA ACCAGACTCC TCATTGGTTC
119301 TGAGCATCTT AACCTCATGG TTCCAAGTTT TTCTCTTCTT AACAGACTAC
119351 GGTGGACAAA CTGATCAAGA AGACAAACCT GGCCTTGGTT GTGGGGACCC
119401 ATTCCTGGAG GGACCACTTC ATGGAGGCCA TCACCGTCAG TGCAAGTGAG
119451 AAGTGTCTCA GGCTGGCCTT GCTGGGAGAA GCAGGCAACC TCTGAGAAGG
119501 AAGCGTCAAG CCACGTTAAC AGCCTGCCAG TCCCTAGGAA GGCTTGTGTG
119551 TTCAGTCTTC CCAGCTCTGG TCCTAGGTGC CTGCTTGGA AAGAATCATG
119601 GCGTATCTGA AAAACATGGT TATCTCTGTT TTCAAATCGT TGTTCTGCTG
119651 TGTGAAGTGG AACAATGTAC CCTCTCTGAC CTCAATGTCC TCTTTCCAAA
119701 GGGGAACAT TGCTACCTTT CTCAGAAAAG TAGAAAGGTA CAGAGTCTTG
119751 TATAAAATCC AAACCTCAATA AATTCTGATT TCTGTCTATC TTTCTTTTCA
119801 TGGGTTTGGT CCCGCTCTTC TGTAATAATGT GGGACAATTC TGATTTAGAG
119851 ATGTGGGAGT TAGGAGTTTA TAAAATGTGT TGCATTGACT CTCCAACAAA
119901 ACACTCTGGA TGATTCCATA CCCCTCCCTC GGCATTTACT GACAGGCTCC
119951 CTCAGTAGTG ACCCACAGCA CAGCCGGGAG TCCTAGCAGC CTGAGGGGAC
120001 TGCTGGTTGG AACAGGGACG GAAAAGGTCT CCCAACACC ATCACTATCA
120051 CCTCTCAGCA CCACTGAGGC CTCTGGCCT TGCTTTTAT TGAGAGACTT
120101 TGTTGTCATA GCAACCCACA GGGTCATATC CCAAGGCCC CAGAGCCAGA
120151 GCAAAAAGAC AGCCAGGAAG AGAGGTTTGC TGCTGCTGCT GCTGCTGCTA
120201 CCCCCTTTT CTCATCACCT GCTTAGATC TTTCTAGCTC CCCCTCTGAT
120251 GACCTGACTG TGCCCTCAA GACAATAAAC GGAATGTAGG CCACATCATC
120301 TACCCTGCTC CTTTTACAAA GGAGGGGACT GAGGTTGAGA AATAAGAGAT
120351 GATTTACCCC AGCTTACAGA TTTTCTTCAT GGCAAGCTG GAATGAGAAC
120401 CCAAGTGTTC TGACTCCTGT TCTTTCAAAA CCCAGCTTCT ACCGGTTATG
120451 CCAAAACATG ACAGAAGTTG CCGTTGGCAA GGCACAGGCA TGCCCTCAGCA
120501 TACCCTCCCC TCCAGGGCTG CTGAGTGGGC AACTCTGCCC ACATTTCTCTG
120551 GCAAGGACAA TCAAGGCCCA TCCTGCTTTT TCCCATGAGA TGTTTGGAGG
120601 AGGGCACTGG CTCTGCAGTA TATTCTCGTG ATCTGGAATG ACAGCCATCC
120651 CTCAGGGGAC AGATAATGAC CAGAACCACA ATGTTTATG CAGCAGTCAG

FIGURE 3, page 34 of 61

120701 GTCAGAAAAT TTGAGAGGAG CCCTGCTGGC ATCCAGTGAA GAGTGGCCAC
120751 ACCGAACTGA TTTCACTTCT CTCTTAGAC AACAAAATGC AGCCTGTGCA
120801 TTCTCCTTTC TTTTTTTTTT TAATTATACT TTAAGTTCTG GGGTACATGT
120851 GCAGAACATA GAGTTTTGTT ACATAGGTAT ACACGTGCCA TGGCGGTTTG
120901 CTGCACCCAT CAACCCGTCA TCTACATTAG GTATTTCTCC TAATGCTATC
120951 CCTCCCCTAT CCCTCACCCC TGACAGGCTC CAGTGTGTGA TGTTCCTCTC
121001 CACTGTGCCA TTGTCTCTCA TTGTTCAACT CCCACTTATG AGTGAGAACA
121051 TGCAGTGTGT GGTTTTCTGT TCTTGTGTGA GTTTGCTGAG AATGATGGTT
121101 TGCATCCTCC TTTCTTTCTG CTCCACTGTC TTGTCCCTCT TAATCTCCTT
121151 CTTTCTTCTC TTTCTTATTC CCTGGCCCTC TCTCTCCAC TCTACCTTGG
121201 TGCCCTGCAT TCAAATTGAC CTATGAGGCA GCCCAAATTG TTTCCCACT
121251 ATTTTCTGGC ACGCTGGCCC TGGCCCCCAC CAGCTGCCCC GAAGACAGCT
121301 GGAGTCCCCT TCTAGCGGAT GATGCCTGTG GTGCGGGTTG GGCTTGACTT
121351 TCTCATGAAT GATTATCTGA CTCTTACCC GTTCTCTTGC CTGTTTATCT
121401 TGCCCTCAGC AGGGGATGAG GATGAGGATG AATCCGGGGA GGAGAGGCTG
121451 CCCTCCTGCT TTGACTACGT CATGCACTTC CTGACTGTCT TCTGGAAGGT
121501 GCTGTTTGCC TGTGTGCCCC CCACAGAGTA CTGCCACGGC TGGGCCTGCT
121551 TCGCCGTCTC CATCTCATC ATTGGCATGC TCACCGCCAT CATTGGGGAC
121601 CTGGCCTCGC ACTTCGGCTG CACCATTGGT CTCAAAGATT CAGTCACAGC
121651 TGTTGTTTTT GTGGCATTG GCACCTCTGT CCCAGGTGAG AGTGAGAGGT
121701 GCTTGAATTT GCAAAGAGGA TTTTACCTGG TTCAAATGAC CCCTGGACTC
121751 CATCTCATTA TCTTCCACAC CATCTCAGAT CTGAACCTAA CAGAGCCTCT
121801 GCCCTTAAAG TGCACAAAAG TCAATCAAAG AGATGAATAA TGACATTAGT
121851 AATGACAGCT AATATTTCTT GAGCACTTTC AATGTGACAG ACACCATGTG
121901 TGTTCAAGCA TTTACACATT TACATTTTCC CCCTGTAATG TTTCCCAAAG
121951 CCCTATTAAA TAGGGTAAAG TATTATCCCC ACTTCACAGA CAAAGAAACT
122001 GAGGCCCACA GAGGTTAAGC TACATGCCCA AGTAAGTGGT CCAATTTCTT
122051 AACCCAAAGG AAGTTGAGT AGACCACAAA CAGTGAAATT AAAAGAATGT
122101 AGATATTGTT CTCCTTCTAT TTACCTCTGG CGATCTCTGA GAGGTAAAG
122151 ATTAGCCAGC TCAAAGATAT CAAAGGAGAA ATGCCACAT ACATTCTTGG
122201 CCTCCTCTAC TTGGAAGGAC ACTGTGAGTA CAAAGTATCT CCTAGCAGGA
122251 CAGCCAAAGG AAGTTCCACA GCTTTTATCT TTTTATAGGA TGAATTACAT
122301 ACTCTTTCTT TTTCTTAGGA AACTCAGAG ACAAACAGAA AGGAGCGGAC
122351 ATTCCTTTAC TCATTGAACA AATATTTACT GAGCACCTAT TATGCCTGTT
122401 ACAGTATTGT GCTAGTTTTT GGGACTATAG TGAAAGGCAA GATACACATG
122451 CTTCTTCTC CACGTGGAGT TTATAATCTA CTGAAGGAGG CAACTCTCAA
122501 CTACTGTAAT TAAAGTTATC TTGTTAAATC CTAGGAAGAA AAAGAAAAGG
122551 TACTGCATAC GGAAGGAAGT TGGGCCTGAA TGTAGGAGTT AGCAGGTAGA
122601 CAGGGGCTGC ACTAGCCCAG GTTCTTTACT TAATTCAGTT AGGGGCTTTG
122651 GGGCCTCTGA ACTCTGAACT TCTGCCAGGG AGCTGGCATC CCAAGTTGCC
122701 CAGAAAGAAA CAGAGCACAT CCTCCTGCAG GGAAGTTAGG CTGAATCTCA
122751 TCAGACAGGA CTTTTCTGTC TGGGCCAAGG GAAATCTTTC CTGTACCAAG
122801 CAAACATATC CTTCAGAGA GTAGCTGAAT TCACATCAAA TTCTAGGAAA
122851 ACCTCTTACC AAAACCCCAG CGCAGGCCAG CGGTATTATT TGTCCATTAG
122901 TGATGCAAGA GATTTAGCTA TCGTGGAAT GCATCAGAAG GTTGGAATTT
122951 AGATGGATGA TCCAGGAAG GCCTGTGGAT GAGATGCCCT GTGATCTCTG
123001 TTCTCCAAGC TTGGGGGGAC CTGAACTATC AGAGGGGGAG GAGGAAATAT
123051 GGGGGAAGC ATAGAGGTGG GAAGAAATAT CAGAGGATCA GAAGCAAAAA
123101 ACAACAATAA CAACAGAAAC AAAAACAAAC AAACAAACAA AAAACAAGG
123151 CCATAGGCAA GAAAGGTAA GAGGTTTTCT CTGGGAGATC TAAAAAAAT
123201 GGCAATAATG AGGTAAGCCA GGCAGATACC TTTGGGCATC TCCAAGTCTT
123251 TGCAATTGGC CAAGACAACA GCTAACAAAC TTTGAGGCTT TAAGAAGGTT
123301 ACCCTGTGAT CCACCTCATCT GATTTAGTGG CTTTGGCTGA AGCTCTTTGG
123351 ATATAGTTGA AGGTACGGAA AGGTCCTTA CATGAGGACT TTAGGGTCAA
123401 GTCTCTTGCT AACATCCTAT GTGACCTTGG GTAAATCTTT TGACCTTAT
123451 TTTTCTTACC TGTAATAATA AAGAATTGGG CTAGATGTCT CTGACAGTCC
123501 TCCCTGTATC TACAATCTGT GCCAAGATCT AAAGTCAAAC ACCCTGCAAG
123551 GCCCTGTGAT ACATATATAA ACCACAAAGA CAGAGCCCCG TCTTCCTTGA
123601 GTCCACAGTT CACCCTGCAT GTCCCCATCA TGGTTCCCCA ACATGTCCCTC
123651 TGTCCCCAAA ATCCAGCACC TCACCCAGTG CTCAATCAGT AGGCATTGCT
123701 CAATAACTGT TGGTGGTTCG TGAATAAATG CCCCATATGA CAGTTAAAAAT
123751 CAGGCATCTA CTCCAAGCAG CTTCCCAGGG TGTCAGGTT CCCTGGGGAG
123801 ATATTATGGG ATGGCAAAC TCCCTTACTG AAAAAAGTAGT CAAAGGAGAA
123851 CAATAAGCCC ACTCAGTAAA TATCAGAACT GGAAAGCCCT TCAGAACTTT
123901 TCAGATCACT GCAGATGAGG AATGGGAAGC CCAGACTAGG GATGTGACCT
123951 ACCCAGGGCC ACACGGCTTG CTTGCGGCAG AACTAGGAGT TAGGAGTGGC
124001 CCCCTAGCCC TTGTCTCTCA TTCCTGGGTT CAGCCCCACA GCTCAAGCTG
124051 CTTTTTGGGC ATACTGGAAG ACAAGCCCTG CACACCTTAG CCTCCTACCA
124101 GTTCCCATGT GTCTTTGTCC TTTTCAGAT ACGTTTGCCA GCAAAGCTGC
124151 TGCCCTCCAG GATGTATATG CAGACGCCTC CATTGGCAAC GTGACGGGCA
124201 GCAAGCCGCT CAATGTCTTC CTGGGCATCG GCCTGGCCTG GTCCGTGGCC

FIGURE 3, page 35 of 61

124251 GCCATCTACT GGGCTCTGCA GGGACAGGAG TTCCACGTGT CGGCCGGCAC
124301 ACTGGCCTTC TCCGTCACCC TCTTCACCAT CTTTGCATTT GTCTGCATCA
124351 GCGTGCTCTT GTACCGAAGG CGGCCGCACC TGGGAGGGGA GCTTGGTGGC
124401 CCCCCTGGCT GCAAGCTCGC CACAACATGG CTCTTTGTGA GCCTGTGGCT
124451 CCTCTACATA CTCTTTGCCA CACTAGAGGC CTATTGTCTAC ATCAAGGGGT
124501 TCTAAGCCAC ACAACAGAGC CTCCAGCAGG GCAGGCCTAG GACTTCTCCT
124551 AAGAGAAGGG CACTTCCCA CCAGTGATCT CTCCGACTG CACTGCCCTG
124601 GAGAGGCAGC ATCAGGACCT AAGCCCCAGG AACTTCACCC AACTTAGGCC
124651 CTGGCAATTA ACTGAAAGGG CAAAGTCTTA ATCAATCAAA CAATGGAGGA
124701 ATCACCAGCT TTACACAGTA TTTAATTGAA TACAAACAAG CAACAGCAAC
124751 AAATCCACCT CCAGCCCATC TCCCCCTCAT ATCCCTGACC CAAAGCAAAG
124801 GTCAGAGCCT TTCGCCTCCT TCTATTCCAT CTTTTGATTA TTCCTTTGCC
124851 TCTCATTTCT TTGGAAGCAG GGTTCCTCCT CTCTGCCCAA TTCCATATGT
124901 CCCTATTATC TCACTCAGCT GACAAGACGT GAAAATGAGT CACATTCATG
124951 TGGCTGGGGT GGGGTTCTTT TTTCAATTGA ATCATTATTG TGGTTGCTTT
125001 CGTTTTTGCCG TTAGGTTTTG CTATTATTT TGTTTTGTCT TTTTTTCTG
125051 AAGTGAGTGA AAAAGGTGCC ACAAAGGAAT TCCAGGTCCG AGCCAAACAGA
125101 GAGAAACATG AATTTTTAGA CACATGCTCT CCTGCCACCT CTGGGCTCCA
125151 TCAAGATCCA GTTCCCCATC TCACTGTTTT CTCTGAGTTC TTGGGAGGAG
125201 TGATGGTGTT GCGGTAGAAA TAAGTCACT CACCCACGCA GGGTACTAAA
125251 GATCTTACAG GAGCTTCAAC TGGAGCAGGA GGAGCTTTTT ATGCTTATGT
125301 TGAATCAAGT CAGATACAAA AAGCAATTGT CCCTCTTTGC CCAAGCCTTT
125351 CCAATCTGT GTGCTTGT GTGTCAGTGT CCACTTGTGT ATCCTTCTGC
125401 AGGAAGACCC GCCAAATAGA AGAGATGGGA CAAAAATAGG AATGGTGTGT
125451 GACGACAAAG GGCTACTGGA AGAACAAAAG GGATACAGGC CTCTTTGATT
125501 ATCTTTGGCT TTGTACCTGA GGCAGGAGAG AAGAGATGTC CAACCAGTGA
125551 GATCTTTAAG AGAAAAGTTT GTATTTTAAA TGTCAATGTG CCTGAGAAAT
125601 GTCAGCTTCA CCACGCTCTT GCTTCTAAT GCTCTATACA AAGAGGCTG
125651 ACTATATTTT TTGAAGTGGT GTAAAACTT AGAGATTTTA TAAGAGAACC
125701 AGGGGCTCCC TTCACCTCTC CTGGTCCCTC AGGTACACATA TGAAAGCATT
125751 TTTACAAGAT AGGAACTGGA ATTCCTCATT TCTCCCATGT TCCTGCCTGT
125801 TCTTAAACTT CATGAAGCTA TTTTCCAGC CTATGGGGTA GTTCTTGCTC
125851 CAGTAAGAGG AATCTTAGTT GTCATAATCC CTTGGAGCCT GGGTTTTTTGG
125901 AGAAAGAGAT CTCGCTGCCC TACAGACCTT TTCTCAACGA ATGTGGGAAG
125951 GACCTGGCTT TAAACACGC ACACAAACAC ACAAATAAAC AGACATAAGA
126001 TGTCACTACG AAAC TGCCCA CGGATCTTTA GGCTTTCTGC ATTGACATAA
126051 ATACATTTTC TAAGGGGGGG GGGGAAGAAA TTAATAAACA CCTGTTAATT
126101 TTAACACAT TTTTAAAGAA AAAAATAATT AAAAAAGAAA CAGTGCTCAT
126151 GTCATAAGCT ATGTTGACAG TTGCCAGTGG AAATGTTGGG TTGGTTCAAA
126201 AAAAAAATAA AAGCTATACT ATATCTCTCT ACATACAGCT TGCTTCTACC
126251 TGTGTTTCTT CAGTGAAAGG TCCAGGGGGC CACTGTGGGC TTCTTGTGAG
126301 GAGACGTGAC TCAGGTGAAG GTGTCACCTC CTCTCACACT CAGGTGCCAA
126351 TGTGTCAGAC CCAGTATATT CTAAGCAAAA ATACTTCAGG AAAATGCCAC
126401 TTGTCAAAAC CTGGACTTTG CGAAGTTGGA AGATGTAAGT AGTAGTAAAA
126451 GCTGTGGTAA TTAGGGAGGA AGGAGGTTTC TGTATCAGAA AGGCATTGGC
126501 CGTGACAGAC TC
(SEQ ID NO:3)

FEATURES:

Start: 2010
Exon: 2010-3793
Intron: 3794-109509
Exon: 109510-109613
Intron: 109614-118338
Exon: 118339-118463
Intron: 118464-119345
Exon: 119346-119445
Intron: 119446-121409
Exon: 121410-121685
Intron: 121686-124128
Exon: 124129-124502
Stop: 124503

SNPs:

DNA Position	Major	Minor	Domain	Protein Position	Major	Minor
378	C	T	Beyond ORF(5')			
742	T	-	Beyond ORF(5')			

2005	C	T	Beyond ORF(5')			
2381	A	C	Exon	124	T	T
5165	C	T	Intron			
5402	A	G	Intron			
6794	T	C	Intron			
9883	A	G	Intron			
10210	T	C	Intron			
12220	T	G	Intron			
13842	G	A	Intron			
14200	C	A	Intron			
15878	G	T	Intron			
16030	A	G	Intron			
16292	T	C	Intron			
16506	T	G	Intron			
17953	C	A	Intron			
23832	C	G	Intron			
25001	C	A	Intron			
25141	A	G	Intron			
25191	A	G	Intron			
26147	-	A G	Intron			
27400	A	G	Intron			
27401	A	T	Intron			
29278	C	T	Intron			
31437	A	G	Intron			
31857	A	G	Intron			
33155	G	A	Intron			
39487	G	C	Intron			
41449	T	C	Intron			
42420	T	C	Intron			
43256	G	C	Intron			
43967	T	C	Intron			
48604	-	A	Intron			
49560	A	T	Intron			
52729	G	T	Intron			
55031	A	G	Intron			
55066	A	C	Intron			
56912	A	G	Intron			
58480	C	T	Intron			
61128	G	A	Intron			
61320	G	A	Intron			
61444	A	C	Intron			
62641	T	C	Intron			
63023	A	G	Intron			
63051	T	C	Intron			
64989	T	G	Intron			
65929	C	A	Intron			
66694	C	G	Intron			
66755	T	A	Intron			
66879	T	C	Intron			
69156	C	T	Intron			
69280	C	T	Intron			
70647	C	T	Intron			
71867	C	T	Intron			
71900	C	T	Intron			
71901	G	A	Intron			
72369	C	T	Intron			
72992	T	G	Intron			
73154	-	T	Intron			
73164	-	T	Intron			
74149	T	A	Intron			
74171	G	A	Intron			
74918	A	G	Intron			
75386	G	A	Intron			
77751	G	A	Intron			
78264	G	T	Intron			
80986	T	A	Intron			
83609	C	T	Intron			
85271	G	T	Intron			
87770	C	T	Intron			
87837	T	C	Intron			
87866	C	T	Intron			

FIGURE 3, page 37 of 61

88238	A	C	Intron
89219	A	G	Intron
89331	T	C	Intron
90794	A	G	Intron
92404	C	T	Intron
92672	A	C	Intron
92684	A	G	Intron
93132	G	C	Intron
93537	A	T	Intron
93557	T	C	Intron
95067	C	T	Intron
96000	T	C	Intron
96877	G	T	Intron
97271	A	C	Intron
97470	G	T	Intron
97518	G	A	Intron
98476	C	T	Intron
98779	C	T	Intron
99218	C	G	Intron
100538	C	A	Intron
101045	A	C	Intron
101232	C	G	Intron
101266	G	A	Intron
101290	A	G	Intron
101326	G	A	Intron
102342	C	A	Intron
104489	C	T	Intron
105266	A	G	Intron
105338	T	C	Intron
105570	C	A	Intron
105928	G	A	Intron
106459	G	C	Intron
107710	C	G	Intron
108062	G	A	Intron
108214	G	A	Intron
108364	C	A	Intron
108657	T	A	Intron
109746	C	T	Intron
111484	G	T	Intron
112879	A	G	Intron
113245	C	T	Intron
113265	T	C	Intron
113497	C	G	Intron
114486	G	T	Intron
114686	T	C	Intron
114817	C	A	Intron
115600	G	T	Intron
115668	A	C	Intron
115745	A	G	Intron
117230	A	C	Intron
118908	A	G	Intron
120430	C	A	Intron
120830	A	T	Intron
121926	T	C	Intron
122102	G	C	Intron
122950	T	C	Intron
123366	C	T	Intron
124947	C	T	Beyond ORF(3')
125010	A	G	Beyond ORF(3')
126043	T	C	Beyond ORF(3')
126064	-	G	Beyond ORF(3')
126283	C	G	Beyond ORF(3')

Context:

DNA
Position

378	TGGCATGTACAAAGGTCCTGGGGTGGACAGTCACTTGGTATAATCCAAGAGTGAACCTGA AGGCTATTGTTGTTGAAATGTAATAAGGGAGAGAGTGACGGGATGAAGGGGGATGAGTGG
-----	--

GAAGCAGTGAATTCTCTGCAAGGCTTTGAAGGTCATGGGAAAGAATTTGGTCTTTATATCA
AGAGCAAGAGAAGACTACTAAAGGGCTTCAAACAGGGGAGCGATATGCTTAAGTCTGTTT
GTTTGTTTTTTAAAAAAGATTACGGTGGCTATATGAGGAAAGTGGAATTGAGAAC TAG
[C, T]
GAGAGTTGGAGTGGTGAGCTCCATTAGGAGGCTACTGAAGTAGATTTCATGAGGTAAGGAG
TGATGGTGGCCTGGGCTGGGATGATGGTGGTAGAAATGGAGAAAGAGTTGATAGGATTTA
GTGATTGGATAAGGGACAGAAGAGAGATGAAGGCTTTAGACTAACATCTGCTTTCTAAC
ATGAGTAACTGGTGGCTGAAGATGCTATTTTCTGAGCTGGGAAACAGGAGAAAAAGGAG
CAAATATGGGGATGAAGACTTTGAGTCTTTAAGGTGCTGTACAAACAAATCAGCATT

742 TGGTGGCCTGGGCTGGGATGATGGTGGTAGAAATGGAGAAAGAGTTGATAGGATTTAGTG
ATTGGATAAGGGACAGAGAGAGATGAAGGCTTTAGACTAACATCTGCTTTCTAACATG
AGTAACTGGTGGCTGAAGATGCTATTTCTGAGCTGGGAAACAGGAGAAAAAGGAGCAA
ATATGGGGGATGAAGACTTTGAGTCTTTAAGGTGCTGTACAAACAAATCAGCATTCTT
TTATTACTAAGGTATCCACACAGTTGTAGCAGAGGGAGAAAGATCGCCCCCCCCCAC
[T, -]
TTTTTTTTTTTTTAGCTATTCCATGGTATTTTCATTCTCATCCACCCAAATGAGGCAG
TGAGTGGTAAGATGAGTATATAATAGTTCAATTGCATTTCTCCCATTTCTCTGAGCTC
AAGCTCACCTTTTAGTGGTTTGGAGCCAGTAGATGAAGCTGCATATCACCCCAAAATCT
TGCTCTAGTTTAAACAAAACCTTTTGGAGAGACATTTGCATGTTTTATTAATAATGATTT
TTACCATTGTTTCTTCCATGTTTGGGTTTGAATTTGAGTGGCTGGCGGATGATCATC

2005 TTTCCATCCCCAGTATTCCCAGCTATTTCAAGCCATTTTCAACGGAGTCTCCACCAGAT
GGTTTGGAGGACAGAGCAGCTATTTGTGCCTCCCATTTGACATCTATTTTCCAAAGTGAGA
GACTGCCCCATATGTTAGTGAATATGTCACTGGAGGTGAAGCATCAGTTGTATTGGTGG
GAACCTGCCGTTTGCTGTCCCTTTTCTCATGCCTTTCTGCCTCTCTGATCTTTTC
TAGGCTCTTGCCCTATCAGGAGGACAACCTGGTGTGCAATAGAAGCCAGTGGCTAAGTCT
[C, T]
GTGTATGGCGTGGTTAAGGTTGCAGCCTCTCACCTCTGCCTTCTCTCCATTTTGGGCTGGT
TACCTTTGTGCTCTTCTGAATGGTCTTCGAGCAGAGGCTGGTGGCTCAGGGGACGTGCC
AAGCACAGGGCAGAACAATGAGTCTCTTTCAGGGTCATCGGACTGCAAGGAGGGTGTCT
CCTGCCAATCTGGTACC CGGAGAACCTTCCCTTGGGGACAAGATTGCCAGGGTCATTGT
CTATTTTGTGGCCCTGATATACATGTTTCTTGGGGTGCCATCATTGCTGACCGCTTCAT

2381 CCTGAATGGTCTTCGAGCAGAGGCTGGTGGCTCAGGGGACGTGCCAAGCACAGGGCAGAA
CAATGAGTCTCTTTCAGGGTCATCGGACTGCAAGGAGGGTGTCTCCTGCCAATCTGGTA
CCCGGAGAACCCTTCCCTTGGGGACAAGATTGCCAGGGTCATTGTCTATTTTGTGGCCCT
GATATACATGTTCTTGGGGTGTCATCATTGCTGACCGCTTCATGGCATCTATTGAAGT
CATCACCTCTCAAGAGAGGGAGGTGACAATTAAGAAACCAATGGAGAAACAGCACAAAC
[A, C]
ACTATTCGGGTCTGGAATGAACTGTCTCCAACCTGACCCCTTATGGCCCTGGGTTCTCT
GCTCCTGAGATACTCTCTCTTTAATTGAGGTGTGTGGTCATGGGTTTATTGCTGGTGAT
CTGGGACCTTCTACCATTGTAGGGAGTGCAGCCTTCAACATGTTTCATCATCTATTGGCATC
TGTGCTCTAGTGTATCCAGAGAGACTCGCAAGATCAAGCATCTACGAGTCTTCTTC
ATCACCGCTGCTTGGAGTATCTTTGCCTACATCTGGCTCTATATGATTCTGGCAGTCTTC

5165 TTCTCTGAATGACTGAACATATCCACAAATAATAAGCGTGGCAGGAGATGGTGTGAAGA
GTAAAAGGAGCATATAGGAAGTTGTGTGTGGGGTGTCTGTTTCAAGAACCTGCTAATT
ATACCTTCAGTAAGAAATGAAGCCATACAACCTCTAGAAGAGGAGGAGGAAGGAACATCAT
GGAAAAGTGGGGAGCCATAGAAGCTAGGGAGAGTGTCTTAGGAGTGTCTGCCAGGT
CCAGCCATGAGACAGAGCTCAAAAAGAGCTGGGCACTGCTGGTGACAGAACTGAGTGACC
[C, T]
GGGGATCCTGCATCTGTTCTTACTCAATCCCTTCTTAATAATGTGACTTGGGGCAGGTC
ATTTATTGGTTCTGGAACCTTAACCTTTCTGATATGCAAACCTGGGAATAACAATACTTTCT
TGCTGGAGGCAAGGTGAGTCTTTTTCAGTTCCTTCCAGCTCTAAGATTTTCTGAACC
ATAGACATAAGCATCAGTGTAGGTGATATTCGCACTTGCCAAAATGGATCAGGGAATA
TTGTCTCTGAAGGGAATGGCCATTGACAAATTGATTATTAGAGCTCTGTTTAGTCAT

5402 GGTCCAGCCATGAGACAGAGCTCAAAAAGAGCTGGGCACTGCTGGTGACAGAACTGAGTG
ACCCGGGGGATCCTGCATCTGTTCTTACTCAATCCCTTCTTAATAATGTGACTTGGGGCA
GGTCATTTATTGGTTCTGGAACCTTAACCTTTCTGATATGCAAACCTGGGAATAACAATACTT
TCCTTGCTGGAGGCAAGGTGAGTCTTTTTCAGTTCCTTCCAGCTCTAAGATTTTCTG
AACCATAGACATAAGCACTCAGTGTAGGTGATATTCGCACTTGCCAAAATGGATCAGGG
[A, G]
ATATTGCTCCTGAAGGGAATGGCCATTGACAAATTGATTTATTAGAGCTCTGTTTAGT
CATTTTGTGGGAAGGATAATCATTTGTTAACGTAAGTAGAAACCTGTGCCTTCTGGAGA
ATACTATCCATTTATATGTACTCTGGGGAGAGTGTATACATACAAATGAAGGACAGGG
CTTCACTGGGAAAAACAACTCCATGGAATTTACATGATTATCGCGATGTCTAGTGTGGAA
GAAGATATGGTAAGGCATTAATGACATTAAGACCACAAAATTGCCATAATTGACGGA

6794 CTCATAAAATATTAGAGCTAGAAAGGACCTTAGAATATCTTCTGCAGTCATGGTTCTTAA

FIGURE 3, page 39 of 61

ATTTTAATGTGTGCTCAATCATCCAGGGATCTCACTGAAGGGCAGATTAGGATCCAGGA
GGTCTAGGGGAGGGATTGAGATTCCGCATTTCTAACAAGTTCTGGATGCTGCGGGCCCCA
ACTTAGAGGTGAAAGGTTCTGAAGCTCTTGACCAAACCAGGAGACCCAGCAAAGAAGTGG
TTTTTCAGACAACCTTGCTTAATTGAATAATGATTGTTGCTCTTAATTCCAACCTTTCAA
[T, C]
GCCAATTTAGCAAGAACCAGAGGCTGTGCTAATTGCCACACCAGTCTGGAACCGAAATG
GATAGCTTCAGGGTACTTGGACAAAGTTGGAACATCTGCTTTCTAATCTCTCCCTCTTTG
TATAGCTTTATTTGCTACCAAGCCTGGTAGTATTGAAAATCTGCCCTCACTATACTCCC
CTAAATATAATCAAGTTGAGGCCAGGCTGTGCTCTATCAATAATATAGGATCCACGAAT
TCACATGTTTGGTTTTATGCTTTACTTCTTCAAAGGTGCTTTTAGCAGCATGGAAGAATG

9883 GTCAAAGAATATGTCAAAGCATGACATATTCCAACCTCCAGGATCCATAAAACACCCCAAG
TTCTGTGGAGACCTATCACATCTGCAAACTCTCCAGGAAGTCCAGAGCCCTCCTGGTT
AATTTGTTTTAGGGACTAGGCATGCGGTATCCCTTGACAACACTGGATCAGCAATTCTCC
TACCTAAGTCAGTCCCACACCATGTGCAGCAGAGTATCCAGTGCCCTGCCCTGGTCTGC
TCACATTGGTTTTGCTCTCCAGAATAATAATTCTCAATATCCACAAGAGATTGATTCCAG
[A, G]
ACTACTCCGAGGATACCAAAATCCTCAGATGCTCAAGTACCTGGTATAAAATGGCACAG
TATTTGGCATATGACCTAGGCATATTCTCTCCCATATACTTTATTTATTTATTTATTTTCG
GGACAGAATCTCATTCTGTGCGCCAGGCTGTCACTCGCTTATTGCAACCTCTGCCTCCCA
GGTTCAAGCAATTCTCCTGCCTCAGCCTCCTAAGTAGCTGGGACTACAGACGCATGTCAC
CAGCCTGGCTACTTTTTGTATTTTTTAGTAGAGACAGAGTTTACCATGTTGGCCAGGCT

10210 CAGATGCTCAAGTACCTGGTATAAAATGGCACAGTATTTGGCATATGACCTAGGCATATT
CTCTCCCATATACTTTATTTATTTATTTATTTTCGGGACAGAATCTCATTCTGTGCGCCAG
GCTGTCACTCGCTTATTGCAACCTCTGCCTCCAGGTTCAAGCAATTCTCCTGCCTCAGC
CTCCTAAGTAGCTGGGACTACAGACGCATGTACCACGCCTGGCTACTTTTTGTATTTTT
AGTAGAGACAGAGTTTACCATGTTGGCCAGGCTGGTCTCAAACACCTGACCTCAAGTGA
[T, C]
CCGCCCACCTTGGCCTCCCAAAAGCTGGGATTACAGGCGTGAGCTACCACGTCCAGCCC
CCCATACTTTAAATCATCTCTAGATTACTTATAATACCTAATACAATGTAAATGTTAT
ATAGTTGTTTTTAATGTTATGCTTTTTTTTATTTGATTTGTTTTTTATGCTGTATTATCCT
TTTTTATGTTTTATTTTTTCAAATATTTTCTACCCGTGGCACCCACAGTTGGTTGGTGGA
ACCTGCGGTTGGTGGAGCCCATGGATGTGAAGGGCTGATAGTATGAGAAAACCTCAGAGGT

12220 ACATCCAAATAGTAACTTAATATTCCAAATATGGCTGCAAAACAAATTGTCGATTATGGA
TGACTACTACTGCCATCTCTCCATACCAGTCCATCTTCTGCCAGGCTGTTTGGTCTTGAT
TTGTCGACCTTTTAGGTTTCTCCCATGTATCCACATGACCTTACCACACCCCACTTCT
ATCTCCAAACGTCTTTCTGAGTTGTGGGGATGCAGATGTATTCTGCCACCATCACAAAGG
CTAACCGAGCCCTGGCTGCGGATCTTCAATTGTTTACATTATTTCCATTCTTACACCC
[T, G]
ACTTCATGTTGTACACTATTTTCTTACATTGCTGTCTCTCTAAACATTCTTTGCTGC
ATCCACTTTTTCTCTATTTGTGCTCTAGGTGCTGCAGAGGCTAATGCTGGGTTTCCTTTC
ATTCCTCCTTGCACTCAGACCTCCCTTCTCAATTCCCTTTTGCCATGTCTCCACTTAA
TCTTAACCTACTCCAGATAGTCTTTTCTTACACTATTGGCATCTGTGCTTGGGTTGCT
TTCAGTCTATTCTCTGATCTATGATTCTTTGTCATGATCAAGAAGGTGCCATGAAAGGAT

13842 TCACTTTCAAAGCCTCTTTCTGGGTTTGGATTTCAGAGCAGCCTGTGCTGTAAAGCAAG
ACAGAAAGCTTCCCTGCCATTTCATGCTGCCAGGGATAGAATGACAGTACTCCTGAGGCT
CTCCCTCCCCACCCCTCCCTGCTGGACAGCTGATCTGCTGGACTCAGCCAGAGCCAGCA
GGCACCCCTCTTTATCCTAGGAGCTGCAAACCTTGATGCCTTTCCAGGAAATCCCCAGAA
GCTGGAGTATCCTCATCTACATGTGGCACAGTGTATGGTTGTGTCAGGTGCTCATGTCCC
[G, A]
TTGCATAGGACTGGGGTGGAAATAGGGACCGTCTTTTGTGTGCTCAGTCCAGTCAATGAG
TAGTGGCCATCCAGGGGGCCATCTTGGAAGGACTTGTGAGGCTGTATCTGCGCTCAGTT
GTAGATGTGAGAAGAAAGGCCAAATATCTGCCAATCCTAGTCTGGGATTCAAGATAGA
AAGAACTGCATGGAGTGAAGAACTAGGAGTCTCCATTTCACTGAGATGCATAAGAATGA
AATTATTGTCATATTCTTCAATACTGGGCCAATCCTAATAAGAAAACCTTTTTGAGT

14200 GAGTAGTGGCCATCCAGGGGGCCATCTTGGAAGGACTTGTGAGGCTGTATCTGCGCTCA
GTTGTAGATGTGAGAAGAAAAGGCCAAATATCTGCCAATCCTAGTCTGGGATTCAAGAT
AGAAAGAACTGCATGGAGTGAAGAACTAGGAGTCTCCATTTCACTGAGATGCATAAGAA
TGAAATATTGTCACTATTTCTTCAATACTGGGCCAATCCTAATAAGAAAACCTTTTTG
AGTCTCTCTTTCTTTATCCTACATATAACAGAAAGCTTTTTCTATTCCCTGGATGAAC
[C, A]
CACAGGGACAGAAATCTTGTGGACAGGTGAAGCAGATAATTTCTTTATCAGACTAGAA
TCTTCCAGAAGCACTGCTAACCTAGTGAGTTTGTACTCTAGACAGGTGGTTCTCAAGCC
AGCTCCCCACCGCAGGCTTTTTCATGGTCTGCCCTCCCTGTGGAACCATGTTTTAGG
TTATTAGCTGATAATTGGATTCTATTTTTTCTCATAAAATACAGCAAAAGATAGCTAGT
GATATTATGATGAGTTAATGTAATTATAGCCAAAGCAGAGAGAAACACATTTTAATTAA

15878 TGTGTCAAAATATCACTCTGTATCCATACATATGTATAATTATTATGTGTCAACTAAAA
TAAAGGAAAAAATCATTTCAGTGTATTTACAAAACATATGTAACCATTAAAGAATAATG
TTTTAAATTATATCTAAGGGTGTGATAAAATTACAGTATAAGATTGTGCTTGAAAAAGTG
CAATAAGAAGTAAATATGTACAGATGAGAAAAAGTGCAAGAAGTAAGTCCTAAGCAGAC
TATACCTTTCCTACTGCATGGTACTTCTCTGGCCTTTTGCTTTGAAAGATTTTGCACCCA
[G, T]
CATGGCAAGTGGTTAGCAGAGGCAGCCATTCTCACTTGTGCGTTGGCTTTGGGAGCCATA
TATGTTGTTCAGCTGGGTGTGGAGTGGAAAGGCTGCATGTTGTATTAATGCATTGTTAAG
AACCTCTAAGAGTGATTCTTTTGGGAAGTGAGACTGACGGTCCGAATGGTGGAAAGACA
ACTTTTAACTCTTTTACTTTACACTTTGTGCACTTTAAATGTTTAAACATGAGCATGCATT
TCTTTAATAATAAAAAATACAAAAAATTTAGCCCTAGATCTTCTGATTTTAACTGCAT

16030 ACAGTATAAGATTGTGCTTGAAAAAGTGAATAAGAAGTAAATATGTACAGATGAGAAAA
AGTGCAAGAAGTAAGTCTAAGCAGACTATACCTTTCTACTGCATGGTACTTCTCTGG
CCTTTTGTCTTTGAAAGATTTTGCACCCAGCATGGCAAGTGGTTAGCAGAGGCAGCCATTC
TCACCTTGTGCGTTGGCTTTGGGAGCCATATATGTTGTTTCAGCTGGGTGTGGAGTGGAAAG
GCTGCATGTTGTATTAATGCATTGTTAAGAACCCTAAGAGTGATTTCTTTTGGGAAGTG
[A, G]
GACTGACGGTCCGAATGGTGGAAAGACAACCTTTAATCTTTTACTTTTACACTTTGTGCAC
TTTTAAATGTTTTAACATGAGCATGCATTCTTTAATAATAAAAAATACAAAAAATTTTAG
CCCTAGATCTTCTGATTTTAACTGCATATTCTTTCTATTGTGTACATATTTTAGCATG
AGAATAAGGTTATGAAGCTGGAAGTAGCAGGCTCCCTTTTCTCATATGTAGGAAGTTAA
GAATGCATTCTACGTTTCTTCTTAAAGAGTTGGCTTCTTCTTTTAAACATAGGGGTAA

16292 TGTTAAGAACCTCTAAGAGTGATTTCTTTTGGGAAGTGAGACTGACGGTCCGAATGGTGG
AAAGACAACCTTTTAACTTTTACTTTTACACTTTGTGCACCTTTTAAATGTTTAAACATGAGC
ATGCATTTCTTTAATAATAAAAAATACAAAAAATTTAGCCCTAGATCTTCTGATTTTAA
ACTGCATATTCTTCTATTGTGTACATATTTTAGCATGAGAATAAGGTTATGAAGCTGG
AAGTAGCAGGCTCCCTTTTCTCATATGTAGGAAGTTAAGAATGCATTCTACGTTTCTTC
[T, C]
TTAAGGAGTTGGCTTCTTTCTTTTAAACATAGGGGTAACCTGGGCCCAGGGAGTTTGGCAA
GGGCCAAATAAAGTCCCTTAATGCCAGCTCAGAAATCTGGATTACCATCCTTGACTGCT
GGCTCCAACCCACCCCTCACCTGAGCTGGTCTGCAGAGGATTCTGTTTGTGTCACTTCAT
CACCAGCAACTACCGACAGATGATGCTTTGGCCTGCTGCCTGGGTAACAGGGCGAGGCTG
GCTCAGGACCATGTTTTAGATCAGGGGACCTCCTTTGATGCCATGTCCATGGTGTCCGA

16506 GCATGAGAATAAGGTTATGAAGCTGGAAGTAGCAGGCTCCCTTTTCTCATATGTAGGAA
GTTAAGAATGCATTCTACGTTTCTTCTTAAAGAGTTGGCTTCTTTCTTTTAAACATAGG
GGTAACCTGGGCCCAGGGAGTTTGGCAAGGGCCAAATAAAGTCCTTAATGCCAGCTCAGA
AATCTGGATTACCATCCTTGACTGCTGGCTCCAACCCACCTCAGCTGAGCTGGTCTGC
AGAGGATTCTTGTGTTGTGTCACTTCATCACCAGCAACTACCGACAGATGATGCTTTGGCC
[T, G]
GCTGCCTGGGTAACAGGGCGAGGCTGGCTCAGGACCATGTTTTAGATCAGGGGACCTCC
TTTGTATGCCATTGTCATGGTGTCCGAGGGCAGCAGGATCAAGGGCTAGACGGGCGAGTG
ATGAGATGAGAGCAGGAGGGGCTCAGCTGCAGCCCCAGGAGAGCCTATGCCAGCCCTGTT
GACCAAGGAGGACAGAAGCAACAGGAGAGCGGAGGCAGAGGGGTGAGTGTCTATCGCTCA
ATGTATAATCGGCAGACATTTGGGGAGCTCATACTGTGGGCTAAGCACAGGGAAGAAAGG

17953 GATTGGACGCAGTTCTGCACAGCACTTTTCCGAATGCCTCTGAAATGAGTCTCACTGAC
AGAACGGGCCACTCTGGGGAACTGAGGGCTCTCTTGGTCTGCATGCTCTTTGCCAT
ACAGATCTGTCTGCCAGGATTTTCTTGGGTGTGTAGGAGGCTGAGAGAGCTCCCTTTT
CTTCTCATGGCTAAATCCCTTGGTCTTTCCAGCCCTCCTGGGGGTTAGAAGGGAGAGGGA
AAAAAAAAGACTGAACCTGTTGTTGTTGTTTGTGTTGTTGTTGTTGCTGTTTT
[C, A]
TATGTTGTCTTGTGGGGAGAGGGTATAAGATTGATTGACAGAGTGGCACACTTCCCTGTC
AAATTCATCATTTGAATTTCTCAGGTAAGATGTTACATTTCTCTGTTAAGATGCTCCAA
TTTCTCTGGTTAAGATTTCTCTGGTAAGATGCTCATGAATTGGTGGAGGTGTTGGCGGGA
TGTGGGAAGTGTGCTGCTCTTTCTGAGTTTTGGGGGAAGTTGCCTTAATTCCTGTCATG
ACTTCTTTGCTCCTTTGGGCTTCATTTCTGTGCAATGTAGTCTGACATGAATACTGCTC

23832 TAGGCAACAGCATTATAACTCCTGCCTTCACAAAGCTTATCTAACACACACATTTCTCTCC
TCAGGCACATCCCAGCCTTCTTGCACTTAGGATTGAGCAGTATGCTTAAGGGCCATTTTC
AACAGCAAACTCATCAGCGCAACACAAACATGTGAAAACGTAGCACTAAAGAGACTGC
AAAAAGGACACTGGCTTACAGCATGGAAGCTGGAAGGAGAAGGCAGAGAATCACCTTGTT
CCACTTCAGCTATGAATATGCACTCAGGCCACCCAGTCATTCAAATTTTATAAATACT
[C, G]
TAATATATATATAAATACCAGGCAGGGTTATTTTTTCTCAAGTCATTTTTCTAATTTT
TTTTAAATGAATAGATAGAAGAGCTGAAGTAAGGGTCAGGAGCAAGAGCTCTGCTTCCCT
TTCCCTTGGGCTTTCGTTAGAGAGCCATCATCTCCTCAATATGTCTCCCAACTCTTCT
AGGCATTGGATGAGTTTGTGTCAGATACGAAACCCAACTTTGCCAGTCACTTCATACTAA
CAGGTGAAATGTAGTGGAGGAGCCTTTTGAAGACAGGGACTCAGCCCCCATTAGCCTCA

FIGURE 3, page 41 of 61

AGACTTGATAAGAAAGAAGTAAATAAGAGAAAGAATAAAAAACCCCTCCACCAAATAC

29278 ATACACTTCAGCAAGTCACCTAACCTGCAAATTTCAAGCATGTGAATCTTGATCTTTCA
TGTGCTAGCTGTGAGACTTTGAGAAATGTATTTAATGTCTCTTTGCTTCCTTTTCTACCC
ACACAATGGGTATAATAATGTCTACCATATATCTTTGCAGCAAGGTCTAAATGGGGTGAT
ACATGCTGAATACATTTCCAACAGAGTCTGTGAATGATAAGCTCTTTCCAAATGTTAGT
TAAAGCTAACCACCTAACCCACCAACAAACCAACCTCTTAGCCAGGACTGATGGAAGGAG
[C, T]
CTGTGAGAGAATGCATTTAAACACTTGGCACCATGCCTGACAAGAGTAAGTACTCGATA
AATCAGTTATTGTATTATCGCATCGGTATTATGACCATTATCCTCTTCTCTATAGGCTT
CAGGTTTTCCTGTCTTTTATCACAGCAGTATCCAGCAGAAGCCTTGATTAACTAAG
TCTCTACTGTGTGTGGCTAGATGCTATAAAGCATCCAGAGAAGTGAGAATTTGGTCCT
GCTTTAAGTAGCTTATAGTCTAATTAGGGGGAAGTAATCAGATAGAAAGGAACTAACA

31437 ACTTGGCTTTGCCGGGGTAAGAGGGGGCACTTCTCTCCTTTCCCTCATGAAGGAGGGAG
AGAAGCCAAAAATCTCCCTACTAGTCAACAACCTCAGGCACCCCTCCTTCTCTCCTCTATT
TTATAGACTGGGAAGGGAGTGATGGTTGTTGGAGGTGGCAGAGCCAGTTCAGCTGCCTTT
TGTGAAGTCTCTGAAGGAGGTGTCTATCTCAACTGCTGGCTTCTGTCTTAAGCCTGGGG
AGAATTAAAGTCTCTTTGCCTCAGTTTGGCACTCCAATTGCCAACATTGGGACAGCAGGA
[A, G]
AAGTTCCATCCAACATCCCATTTAAATATGTAATGTGTATTAGCACAGCGCCTGGCACTGG
GCAGGTATTTTCTAAGTGATAGCCAATGCGAAGCCCTACTTTATTATTTCTCTTTTGCTT
AACCTACAAGGTGTCTAAGACCATTGTTTGTCCACACATAGTAAGATAAACAGCACTGA
GACTGTGGTCCCTTTCTGCCCTGTCTCCCTTATCCACCTGGGAATCTGGAAAGCCAAGCCT
AGACACACTCGTTCCACAAATGTTTACTGAAGCTTGTCTATTCAAAGCACTGTACAGCT

31857 TAACCTACAAGGTGTCTAAGACCATTGTTTGTCCACACATAGTAAGATAAACAGCACTG
AGACTGTGGTCCCTTTCTGCCCTGTGTCTTATCCCACTGGGAATCTGGAAAGCCAAGCC
TAGACACACTCGTTCCACAAATGTTTACTGAAGCTTGTCTATTCAAAGCACTGTACAGC
TACAAAGACCATCTTTTCTGAATCCAAACCAGGCCACATGGTTGGAATAACTTCAAGTA
TGGAGACCAAGAGAAAAGGTGGTTGTGTGTCAGCAAAGCTCTGAGTCCACACCTTCCAGGA
[A, G]
CTTATAGTTGATGCAATGGTGGGAGAAGTCTGAACCTGGATTCAATCTGCTTGATTCCGA
TGAATGTGTGCTAGGAGAGCCATGAGTTCAGAGCAGGAAGAAACCCTGGTTCAAAGA
AGCATCTGTACATCGAAGCTGCTTTATAGTCTGTTGGGAAGCATGCATAATAATTTATT
CTTTCTTTCTTTGTTGGTCAACAAAGATTTCTTGAGTCCCTACTATGTGTCCAGGTACT
CTTCTAGGTACTGAAGATGCAGCAGTGAACAAAGAAGATACAATCCCTGCCAGCGGAGC

33155 ACAGTGCTGAATTTTCAAAATTGCGAATTAGGAAATTGTTGCTCATTTTACAATTTGGT
TTCCTCAGGATTCCCTTTTAAGTAGCCAGCTACCCCACTACTTTGAAATATGACTTGCT
TATAAAATTTGATAGGCTTGGCAGGTTGGCTCACACCTGTAATCCCAGCACTTTGGGAG
GCCGATGTGGGTGGATCACGAGGTGAGGAGTCAAGACCAACATGGTGAAACCCTGTCC
CTACTAAAAATACAAAACCTAGCCAGGCATGGTGGCACATGCCTGTAATCCAGCTGCTC
[G, A]
GGAGGCCAGGCAGCTAGGCAGGAGAATCACTTGAACCCAGGAGATGGAGGTTGCAGTGAG
CCAAGATCATGCCACTGCACTCCATCCTGGGTGACAGAGCAAGACTTCATCTCAAAAAA
AAAAAAGATATATAACAAGTTTTATAATATTCTCAATATGAAGTAGTAAAAAAG
CATGTGTTTTAGGTCTTAGAGGCTGGTCCAGTTTATCTCTGACTCTAATGAGGTA
TAGTATTACCTACATTGATTAGCCCTTCTATACTTCATAGGAGATGCTCAAGACTGCTA

39487 CACTTTGCTCCATCCCTTGGCCTTCTGCAGTCCAAGCTCCATTCTGAGATCATCCAAGGC
TTCTCTTCTGTGTTGATCCTTGGCCTTCTTGAGTCTCTTTCTCCCATGTTCTCCACAAC
AGAGCATTCTCTGACTGTTTTCAATTCTGCATCTCACTCTTTCATCAGTATCTTTTCTC
TACCATGCCCCATAAATTTGGGTGCTCCTGAGGTCCTGTCTTGTCCCTGCTTTCTTG
TTGTACAACTCCTTGATCTACTTCTCTACTCAAGTTTGGTCCACAATTTCTATATTGT
[G, C]
AAGATTCAAATCTGCATCTCTAGCCATATATCCATTTGCCTGCTAGGCATTTCTACCTGA
ATATTTTATAGGCATGCCAGTGGCTCTTACTCTATGGCTCTTACTCTAAGTCTAGACTAC
AGCAGAAAGCAATGCTCTTTTATTAAGGCATAGTGCCTCTTTCAGATAATTTACAGCA
TACAACAGGCCCTGCTGTGCAGCATTACAATTTGTCAATAAATCCATTCTCTTGCCA
GAGTAATGAGCCATTTACAGCCAGGGCGCCAAGATGGACTGTGTTATTTTTTCTGCCT

41449 TCAGATTCCAGGACACCAAGTTTCTGTGGGAGCTTCCCTAGGAATATAACTAAGGAATT
TAAATCAGGTTTCAGCTCATGCTGTACACTCTCTTCTCCACTCAGGCATTGGGTGTGGC
TTTTCCAAGCTTGAGAAGGGGTGATCTGAGATGGGCTTGGGTATAGGGGGAATTATAT
TTAGGTCTACCTGTATAGGAAAAAGTGCCTTCCCAAAGTCTCCCTGGCCTAAAGTATAA
GAGATATGTGTTGGGATTTAGACCCAGAGCCCAAGCCAATAATGGGACCCCTTCTCACA
[T, C]
GTGGCTACCTCCTGCTATCACCACAACAGCTATCATACCCATAACTACAACAGAGGCCAA
TTAACGTGGTGATAATTGACAAATGTCAAGACATCCTACATTGAGGCACACTGTGCGTTT
TGCCTGAGCTTTTAAATTTGGTAGGGAAGGAAACCTTTTATACCTACACCTATCATGGAAG

GCAGAAGGTAAGAGCTAAAAATAAGGTATGCCAAGAACAAAGGCAGGAAAGAAGGGTTTT
AACAACTTGAGGCCTGATCCATTGATTAGTGAAGAGGAAACATGTTCAAAAACCACTCTA

42420 GGGTGACATGATAGATCTGTATTCTAGAAAAGTTAGTTTTGCAGCAGTTGTGTCCATTGA
AAGGGACAGGATAAGGGAGATAGATAAGAAGACATGCTATGATGATAACTAGATTTGGAT
ACCAAGTGGTATGGTGGAAAGGAATGAGAGAACAGGGTCACAGATGAATGACTGCCCAAT
TTCAATCCATCATAACAGGATGTATAGGATTGCCCTTAAGTAAGATGGGGAATCCAAAA
CGAGGAACAAGTTTGAAGGTTTTGGGGCCAAATGATGAATTCATTGGGACATGTTGC
[T, C]
TTGGATATACCAATGGGACATTCATGTGAAATGATCTCGGCAATCCTATCCTGGAATTC
AGGATAGGATCAGAATGAGGGACACAGTTTATAAGGTAACAGAATGGAGGTGATATAGA
AGATAAGGGCAGATAGAGCTTACCAAAGGGGAGAGTTTGAATGAAAAGAAAAGACCAA
AGGCTAAGCCTGTGCTATTCTTTCTCCTCACAATACGCTTCAGACCTGGGCACAAACCAT
CAGTGAGTGTCTGATAACACTACTGTGGGCAATCCCCCTCTATAAGGGCCTGATTTC

43256 AGAAAAACAATTAGAATGGAGAGCTAACTCTTTGGAATGGTCAAAGAACACGGGTCTAC
AAAACCGTCAATAAAGCGCTAAGATGCCTGGGCGGGGTCAAAAAGTCTACCTGGGCGGGG
TCAAAAAGTCTACCTGCTCAGCATATGGGGCCAGACATCTGACCTTTACCAACTCCACA
ATAACCACTTCATCTATGGATCCAGTCTTGGTATCACCTAGTCGCTGTTTTCAAGTAACA
GAATATTTGGTTCTCAATGGTAGGTGACTGGAATACAGCTTACTTTCTCCACCCCTACC
[G, C]
CCAATCCTTTCTGCCCTTATAGTTTAAATTTGCTTGTAAATTACTTGGGAATACATTG
GGAGCCATTATAGGGAATAGAAGGCAGACATGATGAACAGAATGCAGGGTGTTTTTTAT
TACTTCACATTGTGCTCAACAATTAGGAGGAATTCTAGAAGCCCTCCAGTGCCAGGA
ATTGGTCATAGCATGAATAAACTCAATATAGGTTGAGTATTCCTTACCCAAAATGCTTGA
TACCAGAAGTGTTTTGGATTTTGGATTTTTTTTTTGAATATTGTCATTATATACTTACC

43967 GGGTTTTGGGATTAGGGATACTCAACCAGTGGTAGGTTTGGGATGATATCAGCATGCTAA
GGTCAAAGAGACCTAGCTGGGAAGGGTGGGAGGAACATGGAATTTTCATTCTCTGGGCAC
CCCTTGAAACAGTCTTACTATTAGGGCCCCAAATTTGTTCTAAGTGTGTGTGTGTGTGT
GTGTGTGTGTGAGAGAGAGAGAGAGAGAGAGAGAATTTCTTTCTCTTTATATTCT
AAGTTCTCAGGACAAAAATTTGGGTTTCTTTGTATTCTCCCTGCAGCTCCTCATGTAGT
[T, C]
CTAAGCAAATAAAGGAATTCATTAGGTCCTTGATTTCAAGAAGCCTCCAGTTCTCTATGT
AGGAGGAATCTTAGGGTGGCAAGATAAGTTGAGGGACTTTCTTCAAGCACATTTACAA
GTAAGAGAAAATGTGCTGACTGTGTATATCTAAGAATGGGTGGGGCTCAATGATGCCCCCT
AAGTTACTCTTTACTATTATTGATTGATTGATTGATTGATTGAAGAAGCAATGTTTTGAT
TGATTGAAGAAGTAATGTTTCCAATGGCTACAGCAGACTGGAGCAAAGAACAAAATGAA

48604 TTTTGGCTCTATCCTGGCTTCTTCACACAGGGGTGTCCAGTCATCTCATCCTGGTGGGAC
AGGGATAGAGCTGTGGCAGTGGAGATGAGGAAGCTCGCCTCCTAAGTGAAGTCTGAATTCT
TAAATATGGAGCCACTCCATAATCATTGGAGTGAATATTGGGCCATGGCCCTTTTCTT
GCCAGCTGAGCTATGAAAAAAGGATGTCTTAAGACCAGAGGCTGTGGGACCATTTCCAGC
CCCTGCAGGAATCAAAGGAGCTGACAGAATTGTTTGTGTTTTTTCACAAATTGAAAA
[-, A]
AAAAATGTAAATTTTTGAAAAGAAAGCCTCATTGAAAAGAAATCCCTCTCCCAGCTGG
GCTCCCAGGCAGCCTCCTGCAGAACATCCTTAGCATTGCAGAGTTGTTCCTATGGCAACC
GAGTAAGGGGCTTTTGTGTTTCTTGAAGATTGAATCCTTCAACCAGAAGGTAACCAC
TGGTTCTTCCCCACAATCCACACTCCAAACCCCTACCCTTATTTGACTACATGACTAGT
TTTGCATTTATGATTTTTTTATGCCTAATTGAAAAGGCTAAATATACAGAACTGAGG

49560 TGAGGGGTTATGAGACCATAGGCTCATTTTGGGGGGGTCTAAATGCAGTATTTTTTGA
ACTGATATGGGGAAGAAAAGACATTTCTGAATTGTTGTCATGTTGCAGATTCTGGGCCGT
TCCAGCATAAGCACCTTCTTAGAGTACTTGGCTTTGTGAAGTAGTCCTATCCCCTCCT
TCCACTATTTTACATCAAGTTAAATAGAGGAAGATGCCTAGAAATGGCCGTATAGACAG
AGAAAACCTGCACTAAACTCCCTCCGTGATGCTGACTCCTCTAGACTATGACCATCG
[A, T]
GGGGCCAGAAATCATATCTTAAAGATCACTGTGCCTCCAGTACCCAGCACGGTGTTTAAT
AAATGTTTGTGTAATGAACGAAGTAGTAAATTTTCAATCATTAGAGCTGAAGTATCCT
TTAAGATTCTTTAGTCCCTCATTTTACAGATAAGGAAGCTAAGGCTCAAGACATTGTGTG
GCTTGGCCAAAGGCACACAGCAAGCTAAAGGCAGAGGGAGGACAGGACCCGGCTGTCTCA
ACCCCTGGCTGTACACTTCTGCAGCATTTCTAATCTTTTACCATTCTTGCAGGGA

52729 CCAATGGGGAAGCACCAGGGTCAGCCGCAAGGCAGAAGGAGCAAGAGGAAAACATGGACA
AGAGGCTCTACTGTGGATTCAAGTGGCAAAGATGGGAGGGGCAGAGTAAGCAGGTTTAGG
ATTATCGGGTTTGAATGACTTGATTGAGCTGTAGGGTGTAGAGACTGCCTCTACTGTCTG
GCACCAGGGGTAATTAGGGCAGCTGGATAGTGGTCTGGAGTGTGAGAGCTCCCTAAAGGA
GGTGGTTGGAGGTGATGTTTGGATTGGTTGATCTGTATATGAAAGGTGCACGTGCAGG
[G, T]
TGAGTCTCTACTATCACTAGAAATTGGCTGGTCCAGGAGAAGTAGTCTCTCTAGAGAC
AGCAATGCCCCAGATGTCAAAGCATCAGAAAATACAGAAAAAAATTTAAAGCATGATTA

ATTCATACTCAGAGTCTAGTTTTTGTGTAGTTAAGAGCAACCTAAAGAAGTTGATAACT
CGTGTTCAGGTCAGGTTTCCAGAAATCATATTCTCAGATGAAGATTGTCATGAAGGAG
GTTTAAATGCTCAAACCTAAGCCCTAAGGCTCCATACCTGTGGAGGAAGTGAAGAAGCCCA

55031 TAGTGAGGCACACTTACTTCTTAATTTGTGCCACCCACTTTTCAGGCTCCCTTAGGACAG
CCTCCACCTGCTCCTACTGTGCTTCCCATCGTCCCTCTCCTCAGGCACAGGCTGAGGAGT
AATAAGAGCACCTGATATGTGTCAGGCCTTACTGTGTGCTAGGAATTGTGCTAAGTACTT
CCTATGAATTTTCCATTTATTCTTTATAATAACTTTGTAAAGTTAGAGCCATTATTCCAG
AAGGAAAACCGAGGCAATGGGAGTCAAAGCAAAGAATTTGGGCTTTTAACCATTACACT
[A, G]
TTTTGCACAAGTAGCCAGTAATGAAAAGGCTGCTATCCGGAATCATCTTTGCAAAAGGTA
ATTTCTTTAGCACTTTATCAGAAGAAGGGGGCTCCTTCTCAAATTTCTGAGGGAAGAGAA
GTGGGGAAGAAAAGATGACTGAATCCAAAGCTCGGGCAGGGAAAGCACATCGAGTGCCAA
GTGCGCTGCGCTGGGGTCTAGTCCTGACTCAGCCGCCATCTTCCCAAGTGCTTCTGGAA
TTCTCTCCTCTCGTGGGGCTCAGCTCCTTCATCTTAGGAAGAAGGGTAAGATCTACA

55066 CACTTTTCAGGCTCCCTTAGGACAGCCTCCACCTGCTCCTACTGTGCTTCCCATCGTCCC
TCTCCTCAGGCACAGGCTGAGGAGTAATAAGAGCACCTGATATGTGTCAGGCCTTACTGT
GTGCTAGGAATTGTGCTAAGTACTTCTATGAATTTTCCATTTATTCTTTATAATAACTT
TGTAAGTTAGAGCCATTATTCCAGAAGGGAAAACCGAGGCAATGGGAGTCAAAGCAAAG
AATTTGGGCTTTTAACCATTACACTATTTTGCACAAGTAGCCAGTAATGAAAAGGCTGCT
[A, C]
TCCGGAATCATCTTTGCAAAAGGTAATTTCTTTAGCACTTTATCAGAAGAAGGGGGCTCC
TTCCTCAAATTTCTGAGGGAAGAGAAGTGGGGAAGAAAAGATGACTGAATCCAAAGCTCGG
GCAGGGAAAGCACATCGAGTGCCAAAGTGCCTGCGCTGCGCTGGGGTCTAGTCCTGACTCAGCCG
CCATCTTCCCAAGTGCTTCTTGAATTTCTCTCTCTCGTGGGGCTCAGCTCCTTCATCT
TAGGAAGAAGGGTAAGATCTACAGACAAATTGATCTTTAAGTATCCTTAGAGCACTAC

56912 TGAAATACTTTAAACTTTGTAGCTTCCCTTCAGCACAGAAGTGGCTCTCTGAACCAATTTT
AAGCAATCCTGGCTCTATCTGTGCATGTTGATTAGCCTGTGGTTATAGTGTTAACAATT
TAGTGATTCACCTCATTTTAAATCTCTCTTTCCCTTTAGCAGGATCATTTTCTCTGTGT
AAGGGATCAACATTGAGGTAAGAATGGCTAAATAATAGCATCTTCTGGAATACAAATGAC
TTTATAAATAAAGAAGATAAAAGGAAGAAGTAGGATGATTCTCAGCTCTAATACACTT
[A, G]
GCAATGCCATATGCTTTCTCCTGCGTGTACTGGTCAGGCCAGTTCTAGATACAATCATG
CGCTGCATATATGATGTTTGGTCAACAGTGGATTGCATATGTGACGGTAGTCTTTAAGA
TTATAATACCATATTTTGTGTGCTTTTCTAGGTCTAGATATGTTAGATACACACAT
ACTTACCATTGTGTTCCAATTGCCTACAGTTTCCAGTACAGTAACCTGTTGTACAGGTTT
GTAACCTAGGAGCAATAGGCTATACCATACAGCCTAGGTGTGTAGTAGGCTATACCACTT

58480 ACTGTCCTTCTGTGCTGAGGGAAGGCATGTAACCTCTTGCTTATCTTACCTGTGCTCT
AGATCCTGACCTTCTCTGGCAACCTCAGGGACCTTGCAACCATCATTTCTCTCGCCTAAT
GGCGAGACTCAGTCTCTCCCTCTCCCTTTCCACTCTCCCTTGCCATTCTTAGTATCTTTC
TACAAGCAGTCTTCCAAAGTACTGCTTGAGGTCTGAGTTGGAGGGAACATGCCTCTACC
CTACTAAAAGAGAAATTCCTCTGCAGAAGACCAAGCTGACTGACAAATCCCTTTACTG
[C, T]
AACTGCAGCTCTAGCTCCCACCATTTTCTGTACTTACTCTCTGCTCAGGTTCCCTGGC
ATTGCTGATGTCTTTCAGCCTTTGTGCCCTGGCCCTTTCTCTCTCCCTCATCTAGC
ACTACCTGTCAAAATCAGGGACTTACTTTAAATTTATCCCAAATTATCATTTGCCATCAT
CTCCACTGTACCTTATCATATGTTTGAATAGCGTTTCCATTTCCAAATGTTTTCGCAT
GCATTTCTCAATTGAGCCTTACGAATCCTAGAGCTGAGAAGGGTAACAATTTATGAGTC

61128 ATACAAAAATTAGCCAGTTGTGGTGGCATGCACTGTAGTCTCAGCTCCTTGGGAGGCTGA
GGCAGGAGAATTGCTTGAACATAGGAGGTGGAGGTTGCAGTGAAGTACGCCACT
GCACTCCAGACTGGGAAACAGAGTGAGACTCTGTTTATATATATATATATACACACA
CGTACATATACATGATATATATACACATTATTATTGAAAGCAGCCAAAGAAAAATAACA
CATTATATAGAGAAAGAGCAAAATGATGAGTGACTTTATATGTATATATATGTGTGT
[G, A]
TATATATATAATGTGTATATATATACATATATATATATAGGTTAAGAACCTTCAGCACAT
GTATACCTATGTAACAAACCTGCATGTTTCAGCACATGTATCCAGAACTTAAAGTGAAAA
AAAAAAAAGAACCTTCTGCATGCCAGTAACGTGTGCTAAGTGATTAGGATGCAATGGTA
ATAAAAACAAAGTCCCTCTCCTTAAAGAATTTTCTATTTAGAAGGGAAAACGGTAAATA
AAAAATAAATATATAAATTACAAATTTGTGAAAAGTGCTACACATGAAAGAGTGCTGAGAC

61320 TGTATATATATACACATTATTATTGAAAGCAGCCAAAGAAAAATAACACATTATATATAG
AGAAAGAGCAAATGATGAGTGACTTTATATGTATATATATGTGTGTGTATATATATAA
TGTGTATATATATACATATATATATATAGGTTAAGAACCTTCAGCACATGTATACCTATG
TAACAAACCTGCATGTTTCAGCACATGTATCCAGAACTTAAAGTGAAAAAAGAAAAAG
AACCTTCTGCATGCCAGTAACGTGTGCTAAGTGATTAGGATGCAATGGTAATAAAAACAAA
[G, A]
TCCCTCTCCTTAAAGAATTTTCTATTTAGAAGGGAAAACGGTAAATAAAAAATAAATAT

FIGURE 3, page 45 of 61

ATAAATTACAATTTGTGAAAAGTGCTACACATGAAAGAGTGCTGAGACAGACATCAATGG
 ATAACTTTAGATTGAGAAGGGCTCTGACAAAGCAACATTTAAGGTGCAACCTGAGAGAA
 TAGAAGTTAAACAGGCAGATATTGGTGAAAGAGCAGTCTAGGCAGAGGGAACATCATTG
 CAAAGGCCAGGGTAAAGAAGATCCTGGTAAGGAAATGACAGTGGAAGAAGGTTAGTGTA

61444 TATATATACATATATATATATAGGTTAAGAACCCTCAGCACATGTATACCTATGTAAC
 AAACCTGCATGTTGAGCACATGTATCCAGAACTTAAAGTGAAAAAAGAAAGAACCC
 TTCTGCATGCCAGTAACTGTGCTAAGTGATTAGGATGCAATGGTAATAAAACAAAGTCC
 CTCTCCTTAAAGAATTTTCTATTTAGAAGGGAAAACCTGGTAAATAAAAAATAATATATA
 AATTACAATTTGTGAAAAGTGCTACACATGAAAGAGTGCTGAGACAGACATCAATGGATA
 [A, C]
 ACTTTAGATTGAGAAGGGCTCTGACAAAGCAACATTTAAGGTGCAACCTGAGAGAATAGA
 AGTTAAACAGGCAGATATTGGTGAAAGAGCAGTCTAGGCAGAGGGAACATCATTTGCAAA
 GGCCACAGGGTAAAGAAGATCCTGGTAAGGAAATGACAGTGGAAGAAGGTTAGTGAGCAG
 GACTGTGGCTAGGGCGGAGAGGCAGGGAAGTAGTTAGAATTTCAATGCAATAGGAAATA
 TGAAGATTGAAGGCAGTTTTCATTATAAAATAATATGATTGCTATTTTAAAGCTACTT

62641 CCAGGCTGTACCAGGCACTCAGATATGACAGTGAATGAGATAGGCAACATCTTTGCCATT
 GGAGAGCCTACACTGAAGTGGACATGAGGGAGTTGAAAGCAACTCTTATAGGAAATCATG
 GTAAAGACGTTCCAAGAGAAGAAAGATGAAGGGCAACACATGCACGGATGCCAAACATCT
 ATCAGAGAGAAAGGAATTTTACAGCCTGACCTGAATGATGAAAGGAGGTTTTGGAAAGG
 AAAATAGAAGGGAAGGACAAGGGAATTTATCTGGGCAGCAATATTTATCTGCTGTGGTGC
 [T, C]
 TCACCTCTCTCTAATCCTTTTCCACCCAGCCCCAAATTTGAAAGGATTGCAGGGAGCT
 CCTGCTGGAGTCATTTCTGGTATTAAAAATGTACAGAAAGGAAAGCTTTGGTTCTGAGTT
 TGCAGGCTTCCCTGTCTTTTCTTCTATTGTAGAAAGCAGCTTATATAAAAGATGTGCT
 GTGTGGCCCTTTGAGCTGCTGTGATTGTGTTAGGACCCCACTGGATGGTATTTCGCATGAA
 TTAATCTACTGTAGCATCTCTACAAATCAAGAGGCTGGCTTCTGTTTGAATGTCCCAAG

63023 ATTAATAATGTACAGAAAGGAAAGCTTTGGTTCTGAGTTTGACAGGCTTCCCTGTCTTTCA
 TTCTTATTGTAGAAAGCAGCTTATATAAAAGATGTGCTGTGTGGCCCTTTGAGCTGCTG
 TGATTGTGTTAGGACCCCACTGGATGGTATTTCGCATGAATTAATCTACTGTAGCATCTCT
 ACAATCAAGAGGCTGGCTTCTGTTTGAATGTCCCAAGGCTTTGTGCACAGGGCAAGCT
 AAATGTCTCCCTACAGTGAGACTGAAAATGCCTTGGGTGCCCTTGTCGATAGGATCTGAT
 [A, G]
 TATAGATGCATGTCTACAATTGCACAGTGGCTGCTGGCAACATTTATTACAATCTGAATG
 TGAAATGGCTATTCTGTTCAAGGATTCTGATAAAAGTATCAGCCACAGTAGATGTATAA
 GGAGCCTGGTTTCACTGCAACTGACTACAGTTATCTGATTTTTTTTTTCTAGTTCATTTT
 TAGTCTGTGGAGCAACAGAGATTTCTCCCAATGATGTCTTTCTCAGTCACCAGGG
 TGTGTTTATTTGTTTTATGTAGAGGAGATAGAAACCAATCAGTCTAAATCATATTCTGT

63051 GGTTCTGAGTTTGACAGGCTTCCCTGTCTTTTCTTCTATTGTAGAAAGCAGCTTATATAA
 AAAGATGTGCTGTGTGGCCCTTTGAGCTGCTGTGATTGTGTTAGGACCCCACTGGATGGT
 ATTCGCATGAATTAATCTACTGTAGCATCTCTACAAATCAAGAGGCTGGCTTCTGTTTGA
 AATGTCCCAAGGCTTTGTGCACAGGGCAAGCTAAATGTCTCCCTACAGTGAGACTGAAAA
 TGCTTGGGTGCCCTTGTCGATAGGATCTGATATATAGATGCATGTCTACAATGCACAG
 [T, C]
 GGCTGCTGGCAACATTTATTACAATCTGAATGTGAAATGGCTATTCTGTTCAAGGATTCT
 GATAAAAGTATCAGCCACAGTAGATGTATAAGGAGCCTGGTTTCACTGCAACTGACTAC
 AGTTATCTGATTTTTTTTTTCTAGTTCAATTTTAGTCTGTGGAGCAACAGAGATTTCTT
 CCCCAAATGATGTCCTTTCTCAGTCACCAGGGTGTGGTTATTTGGTTTTATGTAGAGGAG
 ATAGAAACCAATCAGTCTAAATCATATTCTGTTGAAATCAGAACCAAGGATCCACAATC

64989 GGTTTAAAGAAAGCAAGGTCAGGTAAGCTTCACAAAGTAAGTCAAGAAGTATTTTACCTT
 TATCTTCTGAAAGAATTTATGCAACGTTGAAATTTATTTGTTTTCAGAGATGGTCAACAGAA
 TATACCAGAGAACTATTTGGACTTAGAGCTTCCCTGGGGGAAGGTTTTGATAAATAAT
 GCAATTTCTTTAATACATAGTACTTATATTTCTATCTTACCTTGTGACAATTCTGATGA
 ATTGTGTTTTTCAAGAAGTTTGGCCATGTCATCTGAGTTGTTAACTTACTACAACAAG
 [T, G]
 CTTTGATAATATTTCTATATTAGCCTTTGAATGTCTATAAGATCTGTCTGATGTTCCCT
 CTCTCACTTTTTTAAAGAAGTCTGCTAGAGGTTTACCAATTTATTTTGTGTTTATTTTA
 TTTTATTTTTTCTTATTGAGACAGAGTCTCGCTTTGTGCGCCAGGTTGGAGTGCAGTGG
 CTCGATCTCGGCTCACTGCAAGCTCTGCCTCCAGGTTACGCCATTTCTCCTGCCTCAGC
 CTCCCAGCAGCTGGGACTACAGGCACCAGCCACCATTGCCCCGCTAATTTTTTGTATTTT

65929 TTAACCTACACATTTCCCTTTAAGCACTGCCTTAGCTGTATCTCACAATTTTGATATT
 GTCTTTTCATTGTCTTTTATTCAATATATTCTAATTTTCTTGTGATTCTCTCTTTGGCC
 CATAGGCTGTTTAGAAATATGTAGTTAGTTTCCAAATATTCGAAGACTTTCACAGATACC
 TTACTATTATTGATTTTCTAATTTAATTTCTGCTACAATCCAAGTATATACATTATAAAGTT
 TCAGCCTTTTGAATGTATTAAGAATATTACCAGAGATAAGAAGATAAGAATATTACCAG
 [C, A]

GATAAGTAGGGATATTTTCATAAATAATAGACGAATTGATTCATCAAGAATATACAACAAT
CATAAATGTGTATGTGTCTAATAACAGAGTCTCAAATTATATGAAACAAAAGTACAGAGAA
CTAAAGAGAGAAATGGCCAATCCCAACATCTTTATCTTTATCAGGTGATTTATCTTGGTG
AACATTCTTGTGCTCTTGAAAAGAAAGTGATTCTGTAGTCATTGGGTATAAAATTCTA
TATATGACAATGAGGTGATTGATAAAATATTTAGATTGTCTATATCCTAAGTTTGTAG

66694 TCCGTTATTATTTATGCAATGTCCCTATTTATCTCTGGTCATATTCTTTATCTTGAAGTC
TTTTTAACTGATATGAATGTAGCCACTTCATCCTTTTTATGCTTACCATTGTCATAGTTT
ATATTTTCCATTATCTTATATTACACTATTTATCCCTTTTACTTAAAGTCCATGTCTT
GTAGACAGTATGCAGTTAATTGTGTCTTGATTATTTTACTCCTTTCTGACAATTTCTGC
CTTTCCATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTATTGT
[C, G]
ACATCTCCCATCTTTTGTGTGTTCCTCATTTCTTGTATTACCTTCTTTTCAGTTA
TTTTTTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTAT
TATTTTTTATTGTTGTCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAA
ATCATATTGTACCACCTTCACATAAAATAGAAGAAGCTTGCAGCAGTCTATGTCCTTTAC
ACTCCCATCTTTGTGTCTATTGTTCCGTATGTATTACATCAGTACATTGTAATCCA

66755 TTTTAACTGATATGAATGTAGCCACTTCATCCTTTTTATGCTTACCATTGTCATAGTTTA
TTTTTTTCCATTATCTTATATTACACTATTTATCCCTTTTACTTAAAGTCCATGTCTTG
TAGACAGTATGCAGTTAATTGTGTCTTGATTATTTTACTCCTTTCTGACAATTTCTGCC
TTTCCATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTATTGTCT
ACATCTCCCATCTTTTGTGTGTTCCTCATTTCTTGTATTACCTTCTTTTCAGTTA
[T, A]
TTTTTTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTATT
ATTTTTTATTGTTGTCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAAA
TCATATTGTACCACCTTCACATAAAATAGAAGAAGCTTGCAGCAGTCTATGTCCTTTACA
CTCCCATCTTTTGTGTCTATTGTTCCGTATGTATTACATCAGTACATTGTAATCCA
AATAGAGTGTTATAATCTTTTCCAAATCCTTGTGTGAATAAAAATTTATGAGTAGAA

66879 CAGTATGCAGTTAATTGTGTCTTGATTATTTTACTCCTTTCTGACAATTTCTGCCTTTC
CATATAATATGCTTATCAATACAGTTGGAGTTAAATCTACCGTCTTGTATTGTGCAT
CTCCCATCTTTTGTGTGTTCCTCATTTCTTGTATTACCTTCTTTTCAGTTATTTT
TTTTTTGTATTCCATTTTAATTCCTCAATTGGCTTTATAGCTATATATCTTTGTATTATT
TTTTATTGTTGTCTAGGGATAGCAATATGTATACTTACCACAGACAATTTAGAAATCA
[T, C]
ATTGTACCACCTTCACATAAAATAGAAGAAGCTTGCAGCAGTCTATGTCCTTTACACTCC
CATTCTTTGTGTCTATTGTTTCCGTATGTATTACATCAGTACATTGTAATCCAATA
GAGTGTTATAATCTTTTCCAAATCCTTGTGTGAATAAAAATTTATGAGTAGAAAAAT
ACATATAACATTTTATTCTTACCTACATACTTACCAGTCTGCTTTTCTTTTATTCTTAC
CTGTTTTCAGTCTTATCTGTAACCCGTTTTCATTTGGTGTCAATTTCCATTAGCATTTCAG

69156 GGCATGTCACTTCCCTGCCCCAAACCCCTTGGTAGCTTTCCATTGCTCTTAGAATAACTTT
GTGATCTACAACATCTTCTTCAAGGCCCGCATGATACAAATTCGGCTATTCTCTAGT
TTCTTATTGCACACCTTGTCCCTCATCCACCTTTTTTTTAGTCTTCTCTTTCTTTGA
ACTTCTACCACAGGTTTTTTCACACGTTCTTCTTCCCCATTAACAATGATCCACCATT
CTCTTTCTTTATCCATGTTACTCATCTCATAACTGAAACATCATTTCCCTAAGGATGGC
[C, T]
ATTCCTGGTTCAGTCAGTCTATATTTTATCCTCCCATCACATACTCTTGTTTTACCCTATA
TTTTTCTTCAAAGCACTTATTTAAGTTGTAATTATGTGTGTTTATTTATGTCTGTCT
GCCCTCAGAAATCCACAGTCCAGGAGAACAGAAATCCTGCCCTTTTATTATACCACA
TCCACAGTATTATTAGTGCCTGTACCTAGTAGGTATGCAGTATGTACCTATTGAATAAA
TGAATTGACTTCTGTCTTTTAGATCGTCTACTCATTTTATCATTTGATGACAAACATAATA

69280 TATTGCACCACCTTGTCCCTCATCCACCTTTTTTTTTAGTCTTCTCTCTTTCTTTGAACCT
CTACCACAGGTTTTTTCACAGTCTTCTTTCCCCATTAACAATGATCCACCATTCTCT
TTCTTTATCCACTGTTACTCATCTCATAACTGAAACATCATTTCCCTAAGGATGGCCATT
CCTGGTTCAGTCAGTCTATATTTTATCCTCCCATCACATACTCTTGTTTTACCCTATATTT
TTCTTCAAAGCACTTATTTAAGTTGTAATTATGTGTGTTTATTTTATGTCTGTCTGCC
[C, T]
TCACAGAAATCCACAGTCCAGGAGAACAGAAATCCTGCCCTTTTATTTATACCACATCCA
CAGTATTATTAGTGCCTGTACCTAGTAGGTATGCAGTATGTACCTATTGAATAAATGAA
TTGACTTCTGTCTTTTAGATCGTCTACTCATTTTATCATTTGATGACAAACATAATACCT
ACATTCGTGTAGTCTTTTCACTCCTCAAAGAGGATTTTCTGCATAGCTCCTCTGAGCCT
CACAAACCCCTTTAAGGAAGATTGTGAATATTATCAGATAAAGATTGTGAGACACAGAAA

70647 TCCAGTCATTTATAAAAGATGAAGAGGAGAACAAAGGTAGGCCAAAGTGGCTTTGTACTAT
TAAAGGCTGCTTGATTCTAAGTACATGTTCTTTGCCACCTTTCTGCCATTCCACATTCT
AGAAGCCATGGGTAAGTCAGCACAGGGATCTTAACATGATAACATTGGTTTTAGGAGGTC
TCGTGCATAATGGACCAGACTTAGAGCACAATGCTGTAAGGTAGTGATTTAGGTGAGCAG
CAGATTCTGGCTTTAGGAGTTTATTATCAGATGCTTTTAAACGACTTGTGGCCAGGAT

[C, T]
CCTGCACCCATGGGAAGCATTGTAGCCTTAGAACTCTGGGAATTCTGAATATAATTCCTG
AATCAATCGTAAGGATGCATATCTGATGCTTAGTGCAAACCAAGAGGCAGAATATTTCGA
GGCAGTGTATCCTTGAACAAACAAATCTAGGTCATTTTCCTGCCATGCTTCAAGCTTACTT
TTCATCCTTCTGATGGTAGTACTAACTACATTTGTAGACCATTACGTGGTCAACACT
GTGCTAAGCTGTTAGCTTCATTTCTATGAGACAGGCACTCTTAGCCCACTTTACAATT

71867 TCTGTCTGGCTTTTCTCAACCTTTCTCTTCTGCACTTTCTTGGATATAATCAAAGCACTA
CCAGGAAGCTCCAGAGTCGGCACCTTTTCATTTTGTGTTTTTCAATTAATTATTCTCAGC
TGCTAAGTGTGTTGACTGTTAAGGGACTCTAGTGGTAAATATTGTCTTTAGCCTGGCAG
AAGCTGTGGTTTTCTTTGATGAGCTCACACGGTGTGGCTTTTAAGATGCTGCTGACCAGG
ACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCAGCAGTGGGCTGGACCCCTTCCAGAAAG
[C, T]
GCTGCTGGGCCAAGAGGCTTCTCCAACTTCCCCTGCCCCATCTAACCAACACCTCAG
TCTCTTCTCCACCTGCTTCCCCTGCCCTCTTCTTCCCCTGCAGACACTTTCTTCTGCCT
GGCAAAAGGAATCTTGTTCATGGAAGCCTCATTAATCTGCATCTTGTCTCAGTTTGGG
TTTGATCACGGCTGCCAGAAGTATTTTAGCCCATGCAGTTGCGTAATGAGATAGAGATT
GGGAAAGGGGGAGGTGACTGTATAGGCAGAGGTTTTTTAAAAAAGTGAGAAAGAG

71900 ACTTTCTGGATATAATCAAAGCACTACCAGGAAGCTCCAGAGTCGGCACCTTTTCATTTT
TGTGTTTTTCAATTAATTATTTCTCAGCTGCTAAGTGTGTTGACTGTTTAAGGGACTCTAGT
GGTAAATATTTGTCTTTAGCCTGGCAGAAAGCTGTGGTTTCCTTTGATGAGCTCACACGGT
GTGGCTTTTAAGATGCTGCTGACCAGGACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCA
GCAGTGGGCTGGACCCCTTCCAGAAAGCGCTGCTGGGCCAAGAGGCTTCTCCAACCTTCC
[C, T]
GCTGCCCCCATCTAACCAACACCTCAGTCTCTTCTCCACCTGCTTCCCCTGCCCTCTTCTT
TTCCCCTGCAGACACTTTCTTCTGCCTGGCAAAAGGAATCTTGTTCATGGAAGCCTCA
TTAAATCTGCATCTTGTCTCAGTTTGGGTTTGATCACGGCTGCCAGAAGTATTTTAGCCC
ATGCAGTTGCGTAATGAGATAGAGATTGGGAAAGGGGGAGGTGACTGTATAGGCAGAGG
GTTTTTTAAAAAAGTGAGAAAGAGAAGGAAACCTCTAAAGAAAAGAGTTTTATGGA

71901 CTTTCTTGGATATAATCAAAGCACTACCAGGAAGCTCCAGAGTCGGCACCTTTTCATTTT
GTGTTTTTCAATTAATTATTTCTCAGCTGCTAAGTGTGTTGACTGTTTAAGGGACTCTAGTG
GTAAATATTTGTCTTTAGCCTGGCAGAAAGCTGTGGTTTCCTTTGATGAGCTCACACGGTG
TGGCTTTTAAGATGCTGCTGACCAGGACAGCTGACTGTCCCCAGTGGGTGCAGTCCCCAG
CAGTGGGCTGGACCCCTTCCAGAAAGCGCTGCTGGGCCAAGAGGCTTCTCCAACCTTCCC
[G, A]
CTGCCCCCATCTAACCAACACCTCAGTCTCTTCTCCACCTGCTTCCCCTGCCCTCTTCTT
TCCCCTGCAGACACTTTCTTCTGCCTGGCAAAAGGAATCTTGTTCATGGAAGCCTCAT
TAAATCTGCATCTTGTCTCAGTTTGGGTTTGATCACGGCTGCCAGAAGTATTTTAGCCCA
TGCAGTTGCGTAATGAGATAGAGATTGGGAAAGGGGGAGGTGACTGTATAGGCAGAGGG
TTTTTTTAAAAAAGTGAGAAAGAGAAGGAAACCTCTAAAGAAAAGAGTTTTATGGA

72369 TATTTTATAGCCATGCAGTTGCGTAATGAGATAGAGATTGGGAAAGGGGGAGGTGACTG
TATAGGCAGAGGGTTTTTTTAAAAAAGTGAGAAAGAGAAGGAAAACCTCTAAAGAAAA
GAGTTTTATGGAATTGGAAGAAGGATGGAGCACCTTTTGGGAGCATGAGGCTGGTGT
CTCTGGTTAGCTCTTCCCACTGGAAGCCCATGGACACTTGCCATAATACCTGTCTGGTC
ACATGTCAGGGGAACCTCTGATCTCCCTTCCATGAGCTTAGTTGGCCAGCCAGGGTGA
[C, T]
ACTTATGCTAGGGAGTGTGATTGATGTTGCTGCTTACAGATTTCCCCTCCACAGACCTG
ATGGGGCAGCCAGGATAGTGGCAGAGAAGAAGCAGAGCAATAGCAGGAAAGAGAGGACA
ACATAACACATTGGAGGTTTATGTTCAAAGACGGGATCTAGGGGTGTCAGAGAAGCACA
CCTACCATGTAATTGGTCTGGAATCTGATGCCAAGTGCACCCCTTGGCTTCTGAGGTTCT
GAGAACTCTTGCTGTGCTTTTCAGCCAGACTATGCCCTCACCTGCCCTGTACTTTAAA

72992 TGTTTGCAATTGGATTGTTGGAGTGTGTGTCATGTTGTTGTTCTTGTATTACAAGACA
AAGAGATTAAAAAACCACATGCAGCTGTCACAGCTAATGTTTATTGAACTTTACTA
TGCCACATGGTGTTTAAGCATTCTATATGTGTTAACTCATTTCCCTAATTCTATGGAC
TAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGAGGCACAGAGAGGTTGGGA
AACTCATTTGAGGTCCTCCAGCTAATTAATAGTGGAGCCAGGTTTTGTACCCAGACAACC
[T, G]
GATTTGAGAATCTGCAGTCTTAGATTAGTAACGTGTTGTTGGCCTGTCACACATTTTAAA
TGACATTTCTGTACACAGAACCATTTATAGTAACCTTTGTATTGTTGAGCTGAAAGCAGTCT
GCAGATGTGCTGCTGGGATTTCAATTCATCTTCAAAGAGGTGTTTTTTTTTTTTTAAAG
GAAATGCTTTTTCTGAGGTTGTATCTAAATTCATAAAATCTTTACGATCAAGATTTC
ACAAATTTTCAATCTGACTCTGTTGCATTGCCCTTCTTCCCATATTCCAGTTAGTTTGTA

73154 TTCCCTAATTTCTATGGACTAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGA
GGCACAGAGAGGTTGGGAAACTCATTTGAGGTCCTCCAGCTAATTAATAGTGGAGCCAGG
TTTTGTACCCAGACAACCTGATTTGAGAATCTGCAGTCTTAGATTAGTAACGTGTTGTTG
GCCTGTACACATTTTAAATGACATTCTGTACACAGAACCATTATAGTAACCTTTGTATT

GTTGAGCTGAAAGCAGTCTGCAGATGTGCTGCTGGGATTTTCATTCATCTTCAAAGAGGTG
[-, T]
TTTTTTTTTTTTTAAAGGAAAATGCTTTTCTGAGGGTGGTATCTAAATTCATAAAAAATC
TTTACGATCAAGATTTTCACAAATTTTCATTCTGACTCTGTTGCATTGCCCTTCTTCCCAT
ATTTCCAGTTAGTTTGTATTGATTGCTGCATCTCCCTTGAGCCCATGGTCCCCACAACA
TTTCTTGCAAGTGTGCTGCTGCTTGCCTTACACTGTCAGGCAGCAGGAGCCTCTCTAGCGGC
CAGCCCACAGTCTGCAGCTCCTTCCTCAGGACGTTTAATTTCCACATTTCTATGCAGT

73164 CTATGGACTAGACACTTAAACAGTCTCCATTGTACAAACAAGGAACTGAGGCACAGAGA
GGTTGGGAAACTCATTTGAGGTCTCCAGCTAATTAATAGTGGAGCCAGGTTTTGTACCC
AGACAACCTGATTGAGAATCTGCAGTCCTAGATTAGTAACGTGTTGTTGGCCTGTCACA
CATTTTAAATGACATTTCTGTACACAGAACCATTTATAGTAACCTTTGTATTGTTGAGCTGA
AAGCAGTCTGCAGATGTGCTGCTGGGATTTTCATTCATCTTCAAAGAGGTGTTTTTTTTTT
[-, T]
TTTTAAAGGAAAATGCTTTTCTGAGGGTGGTATCTAAATTCATAAAAAATCTTTACGATCA
AGATTTTTCACAAATTTTCATTCTGACTCTGTTGCATTGCCCTTCTTCCCATATTCCAGTT
AGTTTGTATTGATTGCTGCATCTCCCTTGAGCCCATGGTCCCCACAACATTTCTTGCAG
AACTGTGCTGCTTGCCTTACACTGTCAGGCAGCAGGAGCCTCTCTAGCGGCCAGCCCACAG
TCCTGCAGCTCCTTCCTCAGGACGTTTAATTTCCACATTTCTATGCAGTTACCTCACAG

74149 TTTGCTCAAGGTCACATAACTAGTAAGTGGGTGGAGCTGTGATGTGAAACTGGGCAGTCT
GATTCTGGGACCTGTGCTCTTAATCACCATCTATATTGCCTCCTACTTGAAACATCCA
GGGAAAATGTTGAGATAGATCAGCTGAAATCTTCTTGCACAGTAAAGCAGGGGCCACCTG
TCCTGGAGTTACATTTCTTGTTCATTGTCAACGATTGTGTTTCAGTGACACCCCTCTTC
AGCCCAAGAACTTACCTGGGTGCTGTGACAATTGGACATGACTAGGAACAACCAAGTGACA
[T, A]
TGAGCCCATCCAAACACAGGGTAGGAAGTGGATGCTTGTCACTCTCTTTTGGTTATAAG
AAGCAGGAACCCAGTAAAGGCACCTTTTATATATCTATAAAGTTGAATATATAAGATATA
TGGGGGCCAGGCACAGTGGCTCACACCTGTAATCCGAACATTTTGGGAGCCCAAGCAGG
TGATCACCTGAGGTGAGGATTCAGACAGCCTGACCAACATGGTGAAACCCCATCTT
TACTAAAAATACAAAATTAGCTGGGCGTGGTGGCACACACCTGTAGTCCCAGCTACTTG

74171 GTAAGTGGGTGGAGCTGTGATGTGAAACTGGGCAGTCTGATTCTGGGACCTGTGCTCTTA
ATCACCATCTATATTGCTCCTACTTGAAACATCCAGGGAAAATGTTGAGATAGATCA
GCTGAAATCTTCTTGCACAGTAAAGCAGGGGCCACCTGTCTGGAGTTACATTCATCTTG
TTCAATGTCACAGGATTTGTGTTTCAGTGACACCCCTCTTCAGCCCAAGAACTTACCTGGGTG
CTGTGACAATTGGACATGACTAGGAACAACCAAGTGACATTGTAGCCCATCCAAACACAGG
[G, A]
TAGGAAGTGGATGCTTGTCACTCTCTTTTGGTTATAAGAAGCAGGAACCCAGTAAAGGCA
CCTTTTATATATCTATAAAGTTGAATATATAAGATATATGGGGGCCAGGCACAGTGGCTC
ACACCTGTAATCCGAACATTTTGGGAGCCCAAGCAGGTGGATCACCTGAGGTGAGGAGT
TCAAGACAGCCTGACCAACATGGTGAAACCCCATCTTACTAAAAATACAAAATTAGC
TGGGCGTGGTGGCACACACCTGTAGTCCCAGCTACTTGGGAGGCTGAGGCAGGATACTTG

74918 TAACAGGTGCTGAAAACAGGAACTGGGAAGTTGCCAGTACCTTCCTGTCTTTTCCCTGG
AACCAACGGTTTTCTTACTTGCTTCTCTCTGCACCTCTGTCTCATTTCCCTCTCTCTTCA
GATGATTTTTCATTGTTGCATCACACATAGAAAAATCAGGATCCACCTTCCCAAGTTT
ACATATCGTTGTTTCAGGCAGCATAGTATCCTTAAACTCCACATTCAGGGAGAAAGC
TTGGGTCAAGGATTCAGCCAAAGGGCAGCGAATGGAGTAAAGATGCAACTGCCAGGTCT
[A, G]
TGGGCAGCAAGGAGGCCGGGAAGGAAGCCGCTGTTGTGGTCCAAGTGACAATTCAACAGC
TCAAAGCATAAGTAAGTTGTGTGCTTTTACAGATGGAGAACTGAGGCACAGAAGGAAC
CTGGCTGGGGTCCAGGTCTCTGGCCTTGTGTCAATGCTAGGTCACTGGATGTGGCGTCT
GATTTCTACAGGAAATGTTGTTTCTCTACTTTGTCCCAGAGCCCACTCAGAGCACTGGCT
GGCCAGGGGGTCTTAGGGCCCTCTTAGGATAGTCTCAGGCCAACAGCCCAGGACAGAAG

75386 GGATGTGGCGTCTGATTTCTACAGGAAATGTGGTTTCTTACTTTGTCCCAGAGCCCACT
CAGAGCACTGGCTGGCCAGGGGGTCTTAGGGCCCTCTTAGGATAGTCTCAGGCCAACAGC
CCCAGGACAGAAGCAACCAAGTGAAAGTTATGAAAGAAAGCTCTTTGCTGATCTGTCAAT
GGCACCCTTGTAGAGCAATACTTAGAACACCTGGATTGAACTACTCATCTCCAAACCT
GTGTTCTTTCTACACAGTGCAGCAAGCCCTTGTAAACCTCACACGTCTCTATGAGGTGAGC
[G, A]
CTTGCAGATCCACACTTTAGATAAGCAAATGGAGGCTCAGAGGGAAGCAGCTAGTTCAA
GGTTATGCACCTGAGCCAGGATGTGGACACAGCTCTGTGCTGATTCCTAAGGGCCTGTG
CTTAGCCACTTTGCAATACTGCTGCTGTCTGCTTCATTTCCTCATCTGTGAGATGGGAA
CGATAATACTCAACTCACATGGATACTGTATGAGGAAAAACAGATAAAGAAGAGAAAGT
GCTTTGAAAACATAAGCAGCCCTGGCAGATGGGAATTATTTTTGCTGCTGACACACATCC

77751 CAATGCCAATGTTTCTGAAGCCCATATTAAATGCCAAAATCTGAGTCAGCTACTGGAGGT
AGAGACATGAATAAGATGGTCCATATTATTTTAGAGGATTCTTTGGTTGCAAAGGGCAGA
CACCCAGCTTGAATTCATTTGGAGAAATTGGGATTTTTTTGGCTTGATAAGCAAAGCA

TGAGAAAGAAAGTTCCAGGGATGATGAAAACAGGAATGCAAAATGTCTCCAGAATTCTTT
 CTTTTTCTTTTAGGCCATCTTTTTCTCTCAAACCTGGTCCCTCCACTGGGCTGGAGAC
 [G, A]
 TTACTIONCAGCAGCACTCAGACCCACATCTTCAGTTTAAATGTTGGAAATGGACTGTCAG
 AGAACATTTAGGCCATTCAATCTGTGGGAGAGATAGGCTATGTAAAAAGATAGCCACTCC
 CATGTGAACAATGTGGTTAGGATTAGAGGCATGAATATACCCCAAACAGGGGTGTGGGA
 AGGAGGTTGACACTCTAGGTGATAATACCCAGACCTTAAGGAGCTTCTGTCTAGAGGGA
 GGTATGGACATGGACAAGTAATCAACAGCTACAAAGCAGAGCTGCCAGCTCTGCAACACA

78264 ACCTTAAGGAGCTTTCTGTCTAGAGGGAGGTATGGACATGGACAAGTAATCAACAGCTAC
 AAAGCAGAGCTGCCAGCTCTGCAACACAAGAGCCCTGAGAGGCATGACAGGGGCAGGGTG
 GGGATCCATGTGGGTCTGGATTGAAGTGAGGAGGGGCATCAGGAAAGCATTCCAGGAGAG
 CTGAGGGACACTTGAGCACACCTCAAAGAATGACTGGGGTCATGAGGTATACAAGGGA
 GGAAGTGCACCCGAGACAGAAACAATCACATAAGCAAAAATGCAGAAGAATATGAGGATC
 [G, T]
 GGGAAAGGCAAGTAGCTCAGTAGTGTGGAGGCCAAGGGACACGAAGGAAGGTGATAAAG
 CCCTGATGTTAAGGATAGAAAAATCAAAGTCCTTTGAAAATCATGTGGAGTTAGGATCTC
 AAGAACCCTACAGGATTTCTTTAGAAATAGAAATCAAAGAAAAACAAGTTTACAGTCTGT
 GAGGGTTGCATAGGAAGTAACGTGGTGAGAAATGTTGGCTTGAGAACACATATCCATAA
 CACAATGGTGTTTAGAGGATTGGGGGAAGGGAGAGAAAATCTCAAATTGTCTCAGTAA

80986 GCATCATATTGCATGAAAACAGCAACCGGAAGTCACAATGGCTCGACGGTGTAAATGAAGC
 CACACAATATGTATTAACACATCATCTACACAGATGGATTCAAAGATACCTTCTTTGTG
 TCTAAGTCCCAAATCTGTGTTTCCCTGGCTCTGTTCCCTCATATCTAGTCACTCTCCAAGT
 CAGCATGCCAACTTGAAAGTGTCATTTTCAAACCTGCTTCTTCTCTTCTGGAAGTTCT
 TCCCTCTGCCATTGTCTCCACAATCCCCACCTTTTCAACCCAGTAGCAAACCTTAAATTTA
 [T, A]
 CTTTTACTTTGTCTTACTTCCCTTCTTATATTCAAATGTTTCTCACTTGCATCTCTTT
 TCATTCAATTCATAAGCATTTATGAGCTCCTGTTATGGTTTGGAACTGTTCTTCATGCT
 GGAGGTGGTCTTATAAACAAGTAATTTCAATTGAGTATTTAGTATGTTAAGTGCCATCCC
 AAAGGCAAAACACCAGCTGTGGGAGGCTCCCCAAATCAGTCTAAGGAAGTTGGGAAAGCA
 TCTCAGAGAAGATGGTGTCTGAGATGGGGAGGATGTGTGAACTGGGCAAGGAAGAGA

83609 TTTGGGCAATTGTAGCAATTTTAAACTATGTTAGATGGCTAGAGATTCTTGAGAATATT
 TCTTTTCTTGGAAAATCATAAGGCTTTGGATAGTGGTACCTATAGAAGCTGACATCAGCA
 GCAGCTGCCAACTCAGTCGATCAGGGCCTTTGGAACCTCACGGGGCTCCTCTACTGACAGC
 CCCATCGGTTTCCCTCCAGCACACGTAACCTCAGCATTGACTCTGGGTAGTAGAGGGTGGT
 TTATGGAATCTGATTCACTCAGAAAGAGGTGGATGCAACACATTTCCAGAGCAGAAGG
 [C, T]
 TTGGCATGTCTGGTCTTAGGCAGAGGGAACCTGGAGATACTTGTCTTATTGTTCTTGAGAT
 TCCAGCAAAAAATAGCCCATTTACAGAGGAAGAAGATATCAGGTCAAATGAAGGCTTTGGTG
 CTACAACATTGCTTAGAAAAAAGAAAGAAATTGGCCAAGTGCACTGGCTCAGCACT
 TTGGGAGGCTGAGGGGGGAGACCCTTGAGATCAGGAGTTCGAGACCAGCTGGCCAAC
 ATGGCGAAACTCCGTCTCTACCAAAAAGTATTAAAAATAGCCGAGTGTGGTGGCGGGCT

85271 CCTTGGGGCATCACATTAAGTAGTTACCAGATTGAACCTGCAACATTGCTATCCAGGAGA
 AATCAGGTCAATATTTACCTTCATGGCAATACCAGTACAGTCCAAGGAGAATGCATAGA
 AGGAAAGAAATCAATCTGATTGTATGTGTTTTTTAGTAGTAATAATAAATATTATT
 ACTATTCTATACAATTTTGTGTGTTGGTGTGTTTTGTTTTGTTGTGTCATGAAAAATGGG
 GTGCTAATCTATTCCCTTCCCAACACCAGTCTCAGAAGAAATTTCCACAGATAGAGAA
 [G, T]
 CTATAGGTTATGAATTTGGCCTTGATGGATTCTGGGTCACTATTTCTCAATGTTTGTCCA
 TGTCAATGTGAAGCTCTTAAGATAAAGAACAATGTCTTACTCGTCTTTTAACTTCTTTAC
 CCCCTAATGCCTATCACATACTTTGCCCATGGAACTCAATAGACATTTGTAAATGGAAT
 TTAATTTCTGAGGTCCAGTAAGCCTTTTCCATCTTCCCTACTACACAGTTTGTCTA
 ACCATGTCTTCCCTTCCATCATCCACCTTATAAACGTTATTACTCATTCTTCCATCACAT

87770 CTCCCTACCTGTCCCTCCTTGACCCAGGAAAAATTGCCGGATATGAAAGTTAATTATG
 ACCCAAGGGAATTGGTACAGATGGGGAAGAAAGAAATGCATTCAAGAGCATTTCATCAG
 TATTGAAATTACACAGAAGGCTGGTGAATTTGGGCTATCCATTCTTGCCCTCCCTCTGTGC
 CCATAATCTCTTGGCCTCCTTCAATTTCAATTTCCCTTGGTTCAGAGGAATGCTTGATG
 GCTTAAGCTAGCCTCAGTTGGCCAAGCATTGGAGAAACAGAGAGGTGTATGACACAGCTA
 [C, T]
 ACTCCCATGGGGCTTACAGGGCAAGGTGAGAGAAGACAGAAGTTGTATGTGCTGGGTGCC
 ACGTGTAGCTACAAACTAGAAATGAGACCAGGTTTCGGAAGAGGAAGAGGGCTTGACAGC
 CTGAGTCATGGGGACAGTTTCTTCAGGAAATGGGATCTCAGCTCTGCCTTGTATGCAGGG
 CTTACATAATAAATATGTTTCATTGTGTTGTTGTTATTGTTGATTAAATAAGATTTGT
 TTTAAGAAGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCCAGAGCAGGCAGCA

87837 GGAATTGGTACAGATGGGGAAGAAAGAAATGCATTCAAGAGCATTTCATCAGTATTGAA
 ATTACACAGAAGGCTGGTGAATTTGGGCTATCCATTCTTGCTCCCTCTGTGCCATAAT

TCCTTGGCCTCCTTCAATTTTCATTTTCCCTTTGGTTTCAGAGGAATGCTTGATGGCTTAAG
CTAGCCTCAGTTGGCCAAGCATTGGAGAAACAGAGAGGTGTATGACACAGCTACACTCCC
ATGGGGCTTACAGGGCAAGGTGAGAGAAGACAGAAGTTGTATGTGCTGGGTGCCACGTGG
[T, C]
AGCTACAAACTAGAAATGAGACCAGGTTTCGGAAGAGGAAGAGGGCTTGCAGACCTGAGTC
ATGGGGACAGTTTCTTCAGGAAATGGGATCTCAGCTCTGCCTTGTATGCAGGGCTTACAT
AATAAATATGTTTCATTGTTGTTGTTGTTATTGTTGATTAAATAAGATTTGTTTAAAGA
AGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCCAGAGCAGGCAGCAGCAAAGG
AGATTAGGAATATAACCCCTTGGAGACGTTCTTCACCTACCTGGTGTGGATTACCTA

87866 TGCATTCAAGAGCATTTCATCAGTATTGAAATTACACAGAAGGCTGGTGAATTTGGGCT
ATCCATTCTTGCCTCCCTCTGTGCCCATAAATTCCTTGGCCTCCTTCAATTTTCATTTTCCC
TTTGGTTTCAGAGGAATGCTTGATGGCTTAAGCTAGCCTCAGTTGGCCAAGCATTGGAGAA
ACAGAGAGGTGTATGACACAGCTACACTCCCATGGGGCTTACAGGGCAAGGTGAGAGAAG
ACAGAAGTTGTATGTGCTGGGTGCCACGTGGTAGCTACAACTAGAAATGAGACCAGGTT
[C, T]
GGAAGAGGAAGAGGGCTTGCAGACCTGAGTCATGGGGACAGTTTCTTCAGGAAATGGGAT
CTCAGCTCTGCCTTGTATGCAGGGCTTACATAATAAATATGTTTCATTGTTGTTGTTGTT
ATTGTTGATTAAATAAGATTTTGTTTAAGAAGATTTGTAAAAACAACCTGAACAAATGC
AATCTCCTGCCAGAGCAGGCAGCAGCAAAGGAGATTAGGAATATAACCCCTTGGAGACG
TTCCTTACCTACCTGGTGTGGATTACCTAAAAGCTTCAGCTAAGTAGGGTCACCCCCC

88238 CTTGTATGCAGGGCTTACATAATAAATATGTTTCATTGTTGTTGTTGTTATTGTTGATTT
AATAAGATTTTGTTTTAAAGAAGATTTTGTAAAAACAACCTGAACAAATGCAATCTCCTGCC
AGAGCAGGCAGCAGCAAAGGAGATTAGGAATATAACCCCTTGGAGACGTTCTTCACCT
ACCTGGTGTCTGGATTACCTAAAAGCTTCAGCTAAGTAGGGTCACCCCCCAAGAAATTAT
TTTAAAAAATGAAATCTGATATTTTAGAAAATCTTATCAAGGATATTTAATTGGACT
[A, C]
TTTACACCTATTTAGGGTCAGTCGGTTTTTGGACAAGTATGCAGGGGTCTTGAATCAGAC
CACTGGGGTCAAATCCTAGTTCTGTCACTTCTAGCTGGGTGACCTTGGACAAAGTTACC
TGACTTCTAATAGCTTCAGATTCTCATGGGCAAAATAGAAATGCTACTAGTACTTAATA
GTGCTCTGAGAAGGATTCAATGAGAAGGATTAAATGTATGTAAGCAGAGTGTGGCCA
TAGGAAGCTGTTATTTATAAGGGAGGGAGCATCCTAAGGTCTCCGAATTTAGGAGAAC

89219 AGAGGGCAGTTGGAAAATTCACAAGACAATCCAGCCTGATTGTTTTGACATGCCTGACT
TCAGGCTGCTAAAAATGAGCTCGAGGAATCAGATAGGAAAAAGAGATAGGTGATGCAATT
TTATTCCATCTCCCAATTTTCTGAGTCAAGAGTTGTTTGTTTAACTCCAGTTAAATTAGT
ATTTATCCAAATTTCTGGGTGCTTGTCCAAAGAAAAGTACCCAGATCTACAAATTAGA
ATCTGGGACTGGGACTTAGGAATTGGCACTTTTACAATTATACCAGATGTTTCTAATATG
[A, G]
GTACTTCAACCACTACCCCTTATAGAAGTGTGCTAGGACCTCTCTTCTGGCAGGTGAA
GTGGAAGGAGTTTTGTGCAAGGGAGATTCTCCACTTCACTTGAAGTGTCTTGGCTTGTA
TCCGCTTGTTTGGTTCTATTTACCAAAGGCTTTCATCTTACATAAATTTCTTTCAGC
TTTAAATAATTAGTTTTGGTAACCAATTGGTATACTGGAAGAACATTAGATTTGGAGTCC
AGGTGGCTTGAGTTCAATTTCTGCTCTGCCATTTACCAGCTGTGTGACATTGGGCAAGT

89331 ATGCAATTTTATTCATCTCCCAATTTTCTGAGTCAAGAGTTGTTTGTTTAACTCCAGTT
AAATTAGTATTTTCCAAATTTCTGGGTGCTTGTCCAAAGAAAAGTACCCAGATCTAC
AAATTAGAATCTGGGACTGGGACTTAGGAATTGGCACTTTTACAATTATACCAGATGTTT
CTAATATGAGTACTTCAACCACTACCCCTTATAGAAGTGTGCTAGGACCTCTCTTCTG
GCAGGTGAAGTGAAGGAGTTTTGTGCAAGGGAGATTCTCCACTTCAACTGAGTGTCT
[T, C]
GGCTTGTATCCGCTTTGTTTGGTTCTATTTACCAAAGGCTTTCATCTTACATAAATTT
TCTTCAGCTTTAAATAATTAGTTTTTGGTAACCAATTGGTATACTGGAAGAACATTAGATT
TGGAGTCCAGGTGGCTTGAGTTCAATTCTCTGCTCTGCCATTTACCAGCTGTGTGACATT
GGGCAAGTTGCCAACCTATCTATGTCATTTCTCATGTAAAGATAATCCCACTTACCAG
GCCACTTTTAGGACCCAGTGAATGATGTGTAACCAATTTTAGGAACACTGGATCATTTCT

90794 GATTTGGCCAAGGTACACAGCTATAAGCAGTAGAACTAAGATTTTAACTCAAGTTTCTA
TGGCCCCAGAATTTATGTGTTTCTCTCTCCATACCACAGGGACAGGTGCAAGTGAGAGAT
TTTGCTGGAAGCACTGGGCTTTTGGAGGCCATATAAAAAATCTGAGCCAGAGCTCA
ACTAAATATTGGAAGAGACTGGGCCAAATATAAGGCTTCTATCTAAGCAGCACCTGTGT
TTCTCAAGGACTGAGGAAAATGAAGGGGAGGTTGGCAAGGCTGCATTTCCAGGGTGC
[A, G]
TGATTATATGGCATGGGGGTGGGGGCCATTATGATGCCCGGACATGGAACCTACACCAGT
GCAGAAAGGGTGTGATTAGAAGCCCTAAGCCAGAGAATGTTTCAGTGTGATAAATGCCATT
ATTTTTTCCCTCATTCAATAGATTTTTTTTTTAGATGGAGTCTCACTCTGTGCCCC
AGGCTGGAGTGCAGTGGCACCATCTCAGCTCACGGTAACCTCTGCCTCCTGGGTTCAGC
AATCTTGTGGTCCAGCTTCTGTAGTCTGGGATTACAGATGTGCACCACCACGCCTGG

92404 TGCTCTGCTACCTACCTGCCAGCTGTTTCCAGGGATGTGGTAAAGATGAATGGGCAAGA

TCTGGGAAAGTGTGTTTGAATCCTTGATTAAAGGCCCTCCAGGCAGATGTAGAATTTTAA
ATGTGTTATATTACTGCCACTATTGTTATGCTTTCTTTTATCACCCAGAATTTACCAT
CTCCTGTTTCAGGTGAACGAGTCTGCCTGACTCTTACCTGCCCTGAATGGCATGGAAAG
GTAGCAGCCCTGAGATGTCCATATAAACAAACATGTTTTTAACCAAGGGATCAGGAGGC
[C, T]
TTCTGGCTGGCTCCTGTCAGCTGGTCATCACCTCTCTATAACTCTAGGCTTTCCCAAGC
TTATTTTATTTCCATCAATAGGACAGGAATATGTAATGTCCTGCTTGAATGAGTATTG
GCTACAAGCCATCTGCCTCTGAACAGAGGTGAAAAGTGGAATCGGAGGAAGGGCAGATG
TCTTTTGAAGGGAACAGACTGTTTTCTGCCACTGCACTCTGCCAGGCAAAAGAGTAA
AGGAACAGCACTCAGGAGAATTCAGTGAAGCGAGGGCAGGGTGCAAAAGGAACCTGAGAA

92672 CAAACATGTTTTTAACCAAGGGATCAGGAGGCCTTCCTGGCTGGCTCCTGTCAGCTGGTC
ATCACCTCTCTATAACTCTAGGCTTTCCCAAGCTTATTTTATTTCCATCAATAGGACAGG
AATATGTAATGTCCTGCTTGAATGAGTATTGGCTACAAGCCATCTGCCTCTGAACAGA
GGTGAAAAGTGGAATCGGAGGAAGGGCAGATGCTTTTGAAGGGAACAGACTGTTTT
CTGCCACTGCACTCTGCCAGGCAAAAGAGTAAAGGAACAGCACTCAGGAGAATTCAGTG
[A, C]
AGCGAGGGCAGGGTGCAAAAGGAACCTTGAGAAATTGGTACTGGGACCCAAAATCAGATTC
TGGCATTTCTGGGAAAAGAAATGGGCATGGGTGGGGGTTTTATCTGTCAATAAAAGCATC
CAGAATGGGGCTAGAAGGAAGTAAATTCAGTTGCCACCTCTGCCTACTGGACAGCCACGG
AGAACTTCTCCTTATCCAAGGTCGAGGAGCCCTCCGGAGTACATACTGATACCATTGGTT
CTCCACACATACCCCATGGAGATAAAACAGGACCTTGAAGCCCTGTCCGTGTTTAA

92684 TAACCAAGGGATCAGGAGGCCTTCCTGGCTGGCTCCTGTCAGCTGGTCATCACCTCTCTA
TAACCTTAGGCTTTCCCAAGCTTATTTTATTTCCATCAATAGGACAGGAATATGTAATG
TCCTGCTTGAATGAGTATTGGCTACAAGCCATCTGCCTCTGAACAGAGGTGAAAAGTGG
AAATCGGAGGAAGGGCAGATGCTTTTGAAGGGAACAGACTGTTTTCTGCCACTGCAC
TCTGCCAGGCAAAAGAGTAAAGGAACAGCACTCAGGAGAATTCAGTGAAGCGAGGGCAG
[A, G]
GTGCAAAAGGAACCTTGAGAAATTGGTACTGGGACCCAAAATCAGATTCTGGCATTTCTGG
GAAAAGAAATGGGCATGGGTGGGGGTTTTATCTGTCAATAAAAGCATCCAGAATGGGGCT
AGAAGGAAGTAAATTCAGTTGCCACCTCTGCCTACTGGACAGCCACGGAGAATCTCTCCT
TATCCAAGGTCGAGGAGCCCTCCGGAGTACATACTGATACCATTGGTTCTCCACACATA
CCCCATGGAGATAAAACAGGACCTTGAAGCCCTGTCCGTGTTTAAACCAATGGGATTG

93132 CTGCCTACTGGACAGCCACGGAGAATCTCTCCTTATCCAAGGTCGAGGAGCCCTCCGGAG
TACATACTGATACCATTGGTTCTCCACACATACCCCATGGAGATAAAACAGGACCCCT
GGAAGCCCTGTCCGTGTTTAAACCAATGGGATTGAAACATGGAATGAACTGCCCCACAAT
CCACCCCTGTGAGAGACCAAGAGCAGTGTGGATTAAACAGGGAATGTTACCCCTGAAAAGG
CATTAGCTTCCACTGGGGCAGCAGGTACAGTGCAAGATGATCCCACTTAAATTCCTAA
[G, C]
ACAGGAAATAAGGAAAGATGTTGTGGAACTCAAGACCTCTCAAGCATACTCCTTTGTA
GTTCTTCCGCAGACCAGACCAGGAATTCAGAAAACACCCTACCTGGTTCCAAACCAGCA
CTGCCAAACTTCTCACCTCTCTGACCCTGTCTGGGAGTTAAGAAAAAAAATCAC
TTTATTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCATCAATTAAGTGACATG
TACGACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTTGGTTCCATTATCTCATT

93537 TGTTTCCAAACCAGCACCTGCCAAACTTCTCACCTCTTCTGACCCTGTCTGGGAGTTA
AGAAAAAAAATCACTTTATTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCAT
CAATTAAGTGACATGTACGACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTG
GTTCCATTATCTCATTAACTCTCAAAAACCCCTGTAGGTAGGTTTTATTATTGCACT
CATCTTAGATTAAGGAACTGAGGCTCATAGAGATTCGGTAATTTGTCAAAAGCCCTAAA
[A, T]
CATAATTACTGCCTCCAGATGTCTCTGATTCTAAGGCCAGGCTCTTAATCAGTAAATGA
TCAATGAATAATGATTTTCATGGCATCTGTGTCATCGGAAAGAACATGGAGAATATGCTT
AACCAAAGTCATAACCAATAAATGAACTTGACAGCAGAGCCGTGATTCTAGCCAAGATG
ACTATTTTCATGCTGTTTTGAAGGCCAGGAAAAGGAGGTTAGACTTGTTTTGGGAAGGGA
AACAGGAGCTATCAAGGTGAACCTTTTCTAAGAGTAGCCCAATAATAGTGCTCGGAGGG

93557 CCAAACCTTCTCACCTCTTCTGACCCTGTCTGGGAGTTAAGAAAAAAAATCACTTTA
TTGGTTGCTCCAGTTATAACTTAAACAGACAGACCATCATCAATTAAGTGACATGTACG
ACTGCTTATTGTATGCCAGTTACTGTGCTGTGGGGTTTTGGTTCCATTATCTCATTAAAT
CCTCTCAAAAACCCCTGTAGGTAGGTTTTATTATTGCACTCATCTTAGATTAGGAACT
GAGGCTCATAGAGATTCGGTAATTTGTCAAAAGCCCTAAAACATAATTACTGCCTCCAGA
[T, C]
GTCTCTGATTCTAAGGCCAGGCTCTTAATCAGTAAATGATCAATGAATAATGATTTTC
ATGGCATCTGTGTCATCGGAAAGAACATGGAGAATATGCTTAACCAAAGTCATAACCAAT
AAATGAACTTGACAGCAGAGCCGTGATTCTAGCCAAGATGACTATTTTCATGCATGTTTT
GAAGGCCAGGAAAAGGAGGTTAGACTTGTTTTGGGAAGGGAACAGGAGCTATCAAGGTGA
ACTTTTCTAAGAGTAGCCCAATAATAGTGCTCGGAGGGAGTAATGTGTGAAGAATAG

95067 AGAGAAATGGAAGCAGGGAGATAAATTAGGTGGTTATTGCAAGAGGCCAGGTAAGAAGAG
AAAGTGGTTTAAGTAGGGTGGTGTGGCAGAGAAGACGGTTCCAAGCAGAGGGGGACCACG
CTGACAAATAAGCGCGGGCCACTCACGCAAGCCCAACAAGGCAGAAGGCAGAAAGGCAAAA
GTGAAGGCCAGAGAAACTGGACACCACCTTTCCAGAGCACAGTTCAAAGGCAATGTCCT
CAAAGAAGACACTCCACCTCTCCCATTTCTCCCTATTGCCTAAAAATAAGAAGGATA
[C, T]
GCGGCCTATGGCAAACCTTGGGCAGGCACGTGGGAGCTGAGCTCTTGCAAAGGCAGATA
GTTCTCTGGTGAGAGAGAAAAGGAAGGCCAGTGAGGAGTGAAGGAAGAGACGAACAGA
GAGCCCGAAAGGCTGAGAACGTTGTCTGGCTTCTGAAAGGCTTAAGGGGTTAGCTCTGG
AGGGTGAATAAAGCCCTAGTTATATTAACACACACGCACACACGCACGCACACACAT
GCGGCACACACACACACATACACACAGTTGAAGGAGACCTGCAGTTTCCAAAAACAA

96000 TATTATTGATCTTGATTACTGAGTTTTTAGGTGTACCCTTAAATGTTGCACCTCTGACTT
ACTAGTCTCACCTGATCCCTGTCTGGATCTATGCCTGTCTGTTCTATATCAGCCCTT
GCTTTGACCATAAGAATAACTTCAGACCTTTAAGCATAGAGGAAATAGGATTTCTGTCTC
CCTTCCCACTTTTGTGATAAATCTCAGCTTCTGCTTTTAAAGTCTATCTCCCAAGTAGTT
TGCTTACTATGTTCTCCCAAGGTCAGTGGTTCTGTGAACTAGCAGCAGGCTAGATTG
[T, C]
CACATTAGCACAAAGGATCCACTATTCTGCAGCCGAGCTGGGACAAGCACTTAGGCCCA
CTGACTCCAACCTTCAATAGCTTGGGACCTACGTTGTCTCCAGGTGGTATAAAACAAGA
ATTTCCCTTTGACTGGGAGAAAAGGAAGAACTCTAAATTGAAAAACAGGTCATCTCG
AATTCTCAGAGTGGAATTTCTGACAACCCCTTTGGGACCCACAATTCAACACACCCCA
AATGGGACAGTAGCTAACATGCAACCTGTAGGCTGTTCTGTCTATCCAGTGCCACTGTGC

96877 GGGAAATTAAGGTGGAAGGCAGGGCGTTTTGACTGCATTTGACCCAAGTCTGAAGAGCCA
GCTCCTCTCTCTTCTAATTATAGAAAGGTTTTGTTTGGACCCAGTGTTTCACGTGTATA
CAATACAACTTCTCTCTTTCTACTTGGATCAAATTTGTTCTCTCAAAATAAGATTCCC
AGCAGTCAGAGAAGACAAGACAGAGAGATCCAACATCTCTAAGCCATGAATCAGATAAC
CAGCCACTTGTCTCTTCACTGCTGGGAACAGATACACTGTTAAATAAAATGATTTTATA
[G, T]
ATTCTTCTCACTGCCTTTCCAAGAAGGGGATTTATCAACTTCAGGGCACAGCAATCATTT
ATTTCCAGACTACTGGCATGCATATATATATATATTTACTTCTTGTGACTTAGAAAAAG
AGAGAATTGGAGTTGTGAATATTTCTGTCTCCCTCACCCAGCCCCCTTGAAGTGAGTCA
GGACAACTTGGGGCCCAATGGAGCTGTAAGTAACTGAGTCACATGCAGAGATGAAACC
TTCACAGACCCACTGATATGGAGGTTGAAGATTAAATTTCCCTTTGAGAATAACTGGGT

97271 ATTTACTTCTCTTGACTTAGAAAAAGAGAGAATTGGAGTTGTGAATATTCCTGTCTCCC
TACCCCGAGCCCCCTTGAAGTGAGTCAGGACAACTTGGGGCCCAATGGAGCTGTAAGT
AACTGAGTCACATGCAGAGATGAAACCTTCACAGACCCACTGATATGGAGGTTGAAGATT
AAATTCCTCTTTGAGAATAACTGGGTAACACTCATAAGAGACTTTCAAGAAGGCCA
GATCCTCCCTCTAATGTATAGTGCAACGTTCTTAACCTCAGCCACTCCGTCATACCCC
[A, C]
ACTCACATGAATACACATAAGCAGTAATATAAGCACTTCCCACCATAGGGCAGCAAA
GAAGGAGGGAATCTTTATTATGGAAGAGTGGAAGGAAGGAAGGGAAGGGAAGGGAAGGG
AAGGGTAAGAGGAAGAATTCTCAGGGTGAGCAGAGGAATGACATGTTTGGGCATAATGA
AGATAATTGAAGTGACAGATTTGTATGAAAAATTTGAAAATATCAGGTGGCAGGCCAGG
CATGGTAGCTCATGCCGTGAATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCAGCTG

97470 ACTGGGTAACACTCATAAGAGACTACTTTCAAGAAGGCCAGATCCTCCCTCTAATGTAT
AGTGCAACGTTCTTAACCTCAGCCACTCCGTCATACCCCACTCACATGAATACACAC
ATAAGCAGTAATATAAGCACTTCCCACCATAGGGCAGCAAGAAGGAGGGAATCTTTA
TTATGGAAGAGTGGAAGGAAGGAAGGAAGGAAGGAAGGGAAGGGAAGGGAAGGAAGGA
TCTCAGGGTGAGCAGAGGAATGACATGTTTGGGGCATAATGAAGATAATTGAAGTGAGA
[G, T]
TTTGTATGAAAAATTTGAAAATATCAGGTGGCAGGCCAGGCATGGTAGCTCATGCCTGT
AATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCACCTGAGGTACGAGTTTGAGACT
AGCCGGGCCAATGGCAAAACCCATCTCGACTAAAAATACAAAATTAGCTGGGTTTA
GTGGCGCATGCCTGTAATCCCAGCTACTCGGAGGCTGAGGCAGGAGAATCATTGAGCC
TGGGAGGCAAGGTTGCAGTGAGTCGAGATCATGCTACTACACTTCAGCCTGGGTGAGAG

97518 CCTCTAATGTATAGTGAACGTTCTTAACCTCAGCCCACTCCGTCATACCCCACTCAC
ATGAATACACATAAGCAGTAATATAAGCACTTCCCACCATAGGGCAGCAAGAAGGA
GGGAAATCTTTATTATGGAAGAGTGGAAGGAAGGAAGGGAAGGGAAGGGAAGGGAAGGGT
AAGAGGAAGAATTCTCAGGGTGAGCAGAGGAATGACATGTTTGGGGCATAATGAAGATAA
TTGAAGTGCAGAGTTTGTATGAAAAATTTGAAAATATCAGGTGGCAGGCCAGGCATGGT
[G, A]
GCTCATGCCTGTAATCCCAGCACTTTGGGAGGCCAAAGCAGGCGGATCACCTGAGGTCAC
GAGTTTGAGACTAGCCGGGCCAATGGCAAAACCCATCTCGACTAAAAATACAAAAT
TAGCTGGGTTTGTAGTGGCGCATGCCGTGAATCCCAGCTACTCGGAGGCTGAGGCAGGAGA
ATCATTGAGCCTGGGAGGCAAGGTTGCAGTGAGTCGAGATCATGCTACTACACTTCAG
CCTGGGTGAGAGAGCTTTCTTTTTTCTCTCACAAAAAAGAAAAGTTTCAAGTTGCAGA

FIGURE 3, page 53 of 61

98476 TGTCCCTTTCCCTCTAGCCACAGGTAACACGCTCTCCAGGCACTGGGAAAGTGGGTAATT
AGGAAAGCAGAGGAGTACCCATGGGCTGTGATGCCAGTTATAAACCCAGACATTTTCAGA
ATTAACAGAATGAGCATCAAGTCCTCAAATGGGTCTACATCCATAAACATGTCCAGCAGT
CAGCTCTTTACTGTAGTAGACAAAATGTTCTTACACTTTCCCTAGGGGAAGCCACAT
CCTCAGTAGGTTATCTCTGATGAGTCCAGCTAGTCACAGGTATGTAGAAGCTGCATGCAG
[C, T]
AGAGGGCTCAAAGGAGGTCCAGAATAGATACCAAAGCAAAGGGGAGTCTGTGCACGTT
CTCACACGCCCCGAAACACTCTTTTGTTCACAAAATAGATGGTGTAGGGTAGTTCCA
AGAGATCATTTAGCTCAGGTTCTTGCCTCCATAAAATAAATAAGCCTTCCATATTAGTTG
TCTGTTGCTGTGTAGCAAATTGTCAGAAACGTAGAGGCTTAAAGCAATACCCATTTATTA
TCTCGCAAGTTCTGTATCTCAGAAGTCCAGGCAGGCTTGACTGGGTTCTCTGTCCAAGTT

98779 AGGGCTCAAAGGAGGTCCAGAATAGATACCAAAGCAAAGGGGAGTCTGTGCACGTTCT
CACACGCCCCGAAACACTCTTTTGTTCACAAAATAGATGGTGTAGGGTAGTTCCAAG
AGATCATTTAGCTCAGGTTCTTGCCTCCATAAAATAAATAAGCCTTCCATATTAGTTGTC
TGTTGCTGTGTAGCAAATTGTCAGAAACGTAGAGGCTTAAAGCAATACCCATTTATTATC
TCGCAAGTTCTGTATCTCAGAAGTCCAGGCAGGCTTGACTGGGTTCTCTGTCCAAGTTCT
[C, T]
GTGAGACTGAAATCAAGTGTTGGCCAGGCTGGGATCTTATCTGGAGGCTCTGAGGACAT
ATACGCTTCCAAACCTTATTCAGGCCATCAGCAGAATCCCGTCTCTTGTGGCTTGAGGTTG
GAGGTCCCCGTTTCTTGTGCTGGCTGTATCCAGGGACCACTCTTGCACCTACAGGCTGC
CTATGTTCTTATTCACAAGACACCGTTCATCTTCAAACCAAAGCAGCATGTAGAATCTTT
CTTGTGGCTCGTATCTTCTGGCTTTCCCTTCTCTTTAGCCAGAGAAAGTTCTTTGCTT

99218 CTGGCTGTCTCCAGGGACCACTCTTTGCACCTACAGGCTGCCTATGTTTCTTATTCACAA
GACACCGTTTATCTTCAAACCAAAGCAGCATGTAGAATCTTTCTTGTGGCTCGTATCTTT
CTGGCTTTCCCTTCTTCTTTAGCCAGAGAAAGTTCTTTGCTTTTAAAGCCTTCATGCGATT
CAATCAGGCCCACCTGGATAATGTCCCTATTTTAAAGGTAAGTGTATACCGTATAACAT
TTCAGGAGTGATAACAGCACATTTACAGGTTCCAAGGATTGGGGCAGAACATCTTTGGGG
[C, G]
AACATTTTAGAACTCTGCCTCCCCACTCACCCATAATCTTTTAAAAACCAAATCTTGA
AGCCTTTTTTTCCCAAAGGCCTTTTTGAATAAGCACATTTATACCTAACTTCATCAGACA
CCCACTTTGAGCAAACACTAGCATGTGGCAAATAGGCTGTAAATCAATCAGAACTATTC
TTTCCCACCACATCTTTCTCAAACACATTGGGAGAATCTGACACTGTCAAGTGGTATACC
AGAGCAGACTCCTACCATCTCACAAGAGCTGACTGTTAAATGTTTAGTAATTGTGGACAT

100538 TGTAACATATTGGTAAGTTAATTTGAAATGTGGTTTCTAGATCTCTCATCATCCTAGTCAC
CCTACTCTGGATGTACTCCAAAGTCCCTCTCAAGATATAGTGTGAGAATTGACCTAATTA
GTCCAGCATTTGACTGAAACGCTAGACTTTGACTCCAGCCCCCTTACTGGGCTG
AGCATTTCAAGCCGCTTCTCTCTTTCCCTGGGTCTTTAATAGAGTCAGAGCGACTTCTCC
AGGGGATCTTTTGGCCATGGACCAGTAGCATCCACACGCTGGGGCCTTGTTAAAAAGG
[C, A]
AGGCTCTCAGGCCCCACCCAGATCTACTGAATCAGAATCCACACATTAACAAGATGCTT
GGGTGATTTCATGTGCACATTAAGTTTGAAGACACCGCTTTAGGGACGAGATGACACA
CTTATTTTAAAGAGAACCCAATTAGAGACCTTAAGCCTTCTCATGGAACAGGGGCCCTC
CCCTCAGACCTTGGGAGAGGGGTGAGGAAATATCAGTGTGAGGTTGTTGGTGACAGGTG
CGGGTGGGGGTTTCAGTCCACGTTCAAAGAGCCAGAAACCTGGCAGGGGAAGAGATGGGG

101045 GGAAATATCAGTGTGGGTTGTTGGTGACAGGTGGCGTGGGGGGTTCAGTCCACGTTCA
AAGAGCCAGAAACCTGGCAGGGGAAGAGATGGGGCAGTGACACCCAACCGGAAAAATAAA
GGAAACTACAAGAAGAACCCAGCTAAGAGATGTGAGGCTTCTGAAAGTCCCATGGAAAG
GTTCCGAGCTTCTCCACCTGCTCGGTCCAGCTGCCCCAGGTCAAGGAAGCTCTGTGAGTG
TTAGCTGACCCGGAGCAGCAAGGATACATTAGAAGTGATGAAAGGAACGCTTCTTGAC
[A, C]
GGGTAAAGAGTCATTAGTAGGAATGAGACAGGAAGAGGTACAGAGTCAGAAGCCCAGC
CTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGGTTAGGAGGCCACCTACTCA
CAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTAGTGTG
GAAATTTCTGTGCCCTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCAC
CTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAAAATCCTAGCTCAGC

101232 GCTCCTCCACCTGCTCGGTCCAGCTGCCCCAGGTCAAGGAAGCTCTGTGAGTGTAGCTG
ACCCGGAGCAGCAAGGATACATTGAGAAGTGATGAAAGGGAACGCTTCTTGACAGGGTAA
AGAGTCATTAGTAGGAATGAGACAGGAAGAGGTACAGAGTCAGAAGCCCAGCCTGTAC
TCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGGTTAGGAGGCCACCTACTCACAAATAC
AATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTAGTGTGGAATTT
[C, G]
TGTGCCTCCTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCACCTGCATA
AGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAAAATCCTAGCTCAGCTGCTTAA
TAGCTGTGCGACTGAGCAAGTTACTTAACCTCTTTGAGCATCTGTTTTCTCATCTTTAAA
ATGGAAGTAATCATAATTGACCGAGGCCAGTGGCTCACACCTATAATCCAGCACCTTGG

AAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGAGTTTGAGACCAGCATGGTGACACCTC

101266 CAAGGAAGCTCTGTGAGTGTTAGCTGACCCGAGCAGCAAGGATACATTGAGAAGTGATG
AAAGGGAACGCTTCTTGACAGGGTAAAGAGTCATTAGTAGGAATGAGACAGGAAGAGGT
CACAGAGTCAGAAGCCAGCCTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGG
GTTAGGAGGCCACCTACTCACAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGT
GCTGCTGGGATTCAGTGTGGAAATCTGTGCCTCCTCACTGTGGCTGCAGCTTGGGAAT
[G, A]
ACATCCAGAGCTTACCCACCTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATAG
GCTAAATCCTAGCTCAGCTGCTTAATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTT
TGAGCATCTGTTTTCTCATCTTTAAATGGAAGTAATCATAATTGACCAGGCCAGTGGC
TCACACCTATAATCCAGCACCTTGGAAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGA
GTTTGAGACCAGCATGGTGACACCTGCTCTAGAAAAATACAAAATTAGCCAGGCAT

101290 TGACCCGGAGCAGCAAGGATACATTGAGAAGTGATGAAAGGGAACGCTTCTTGACAGGGT
AAAGAGTCATTGAGTAGGAATGAGACAGGAAGAGGTACAGAGTCAGAAGCCAGCCTGT
ACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGGGTTAGGAGGCCACCTACTCACAAT
ACAATACAGAGGCAGATCCACTTATTACCTGCCTGTGCTGCTGGGATTTAGTGTGAAAA
TTCTGTGCCTCCTCACTGTGGCTGCAGCTTGGGAATGACATCCAGAGCTTACCCACCTGC
[A, G]
TAAGAAATAAGCTATAGGTGTAATAGGGGGACATAGGCTAAATCCTAGCTCAGCTGCTT
AATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTTTGAGCATCTGTTTTCTCATCTTTA
AAATGGAAGTAATCATAATTGACCAGGCCAGTGGCTCACACCTATAATCCAGCACCTT
GGAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGAGTTTGAGACCAGCATGGTGACACC
TCGTCCTAGAAAAATACAAAATTAGCCAGGCATGGTGGCAGGTGCCTGTAGTCTTAG

101326 AAAGGGAACGCTTCTTGACAGGGTAAAGAGTCATTGAGTAGGAATGAGACAGGAAGAGGT
CACAGAGTCAGAAGCCAGCCTGTACTCAGAGATTATTTCTGGCATGGGAGGGCCGAAGG
GTTAGGAGGCCACCTACTCACAATACAATACAGAGGCAGATCCACTTATTACCTGCCTGT
GCTGCTGGGATTTAGTGTGGAAATCTGTGCCTCCTCACTGTGGCTGCAGCTTGGGAAT
GACATCCAGAGCTTACCCACCTGCATAAGAAATAAGCTATAGGTGTAATAGGGGGACATA
[G, A]
GCTAAATCCTAGCTCAGCTGCTTAATAGCTGTGCGACTGAGCAAGTTACTTAACCTCTT
TGAGCATCTGTTTTCTCATCTTTAAATGGAAGTAATCATAATTGACCAGGCCAGTGGC
TCACACCTATAATCCAGCACCTTGGAAAGGCCGAGGCCAGTGGATTGCTTGAGCCCAAGA
GTTTGAGACCAGGCATGGTGACACCTGCTCTAGAAAAATACAAAATTAGCCAGGCAT
GGTGGCAGGTGCCTGTAGTCTTAGCTACTCGGTAGGCTGAGGTGGGAAGATTATATGAGC

102342 ACCCTGTCTCAATAAATAAATAAGAAGAATGAAACAAGAAAGTTCTTCTTATGGTTCTCA
TGGTGTGTGAGACAAATGTAAGCATATATATTATCTTAGAATTCTTCTCTCTGTATAAAG
AAGGCCTCCTCAATGTATTAATCATCTGTTCAACTAATAAATGCTGCTTACTCCCACTT
TCACTATAAGGAACCAATGGCTAAAGAGAACCCTTCCCTTTGTCAGCACCTGAGGAT
CAGAGGCCTGATTGTAATGTCTCGATGCAAGGACTATTTCAAAGGCCAGCCAGGCAG
[C, A]
CCAGACATGTATTTTCTAATCGTCTCCAGGTTGTTTGATAGAAGATCTCCTGGGAGCAGG
TTTCCGCAGCAGCTCAGCCAGGTCTGTTCTGGGAACGCTGTGTGCATTGGCACCTCCCTT
GGCAGAAAGCTTGGAGGAAAGGCAGGTGCAGGTCTTGAGCCTCTGACAGCATTACTGGC
TCTAGGACAGCTGCTCAGGATAATCTGTCCCATGACCATTAAGTAACCTGCCACTGTGC
GGGAAGAAGAACTGGAATGGGGGGCCAAAAAATCTGAAACCCCTCACTTGAACCAGT

104489 GTTCAAGAGCTGGAAGGGATTTTTCTAGCCTCCAGGCAAGGTAATACCATAAGTCCCAAC
AGTGATGCCCTCCCTGGGAATGATCTCAATGGGAGAATCCTATACCCTGCCTCCATT
CATTCTTGTCTGTGAGTGGTCTGCTGGCTAACCTAAGTTACTCTTGCCACTAGTTA
ACGCCCTGTCTTATTTCTCTGTGCCACCTAAGATGTCAATCAAACAGCACGAGCCAT
GCTATGTACATGACATGTTGTCTGTCCAGCCAGAGCTTGTGTCTGATGGGGGCACAGA
[C, T]
TAGATTTTGAGAGAAATCTCTGTGTACCACCCTTAACATTCCAACCCCTCTAATAGCC
CATTTAGGATTTATCATACTGTTTCAATCCAACCTTTCATGACCTGATTTCTATTTCCAG
CTTCAACCACCCCTTGGGTCAACCTGTACTTATTGAGTTTCCCTAGTTTTCTGAATTA
ATGACTGAAGATGATAAGCTTCCCTTACATATGACTCTCAAACCACCAAACTGGGATTGT
TGTTACTCTTAGTGATAATGGTGTCTATTTATGAACTTTTAATAGGGAACACAAACCTT

105266 AGGCCAGAGCATCATGGCCTTTCACAAGTTGAAGAGCCACGGGCTTTCTACGGTAGCCAG
CCACGCTTTTCCATGACTGGGGTGGGTGTGGCAAGTGATGAGGGTTTGGAGTTTCATGTGG
TGGGGTGGCAGGGACAGGTGTCTTGGTAACTGCTGTTGCATTCACTTCAGGAGCAAAGG
ACCAGATCTGATTCTGCAGGATCAACAATATGGACACTGCAGGCTCTGTAGACATCCAAA
GCTCTAATGGTGACTTGGGGAAGCTCAGGAGGGCAGGGAGGTGTATCCCATTTAGAATGT
[A, G]
AAGATTCTTATTTTATAAAAAAGAAAAAGGAGACTGAAGGCCTCAGTCTCTTCCACA
AAGCCAGGCTGTGGGTAGCAGAGTCTCAAAGGGTGCAGGCCATGGCCACTGCCAGGG
CTCCTGCTCAGGCCTCCTCACTCCCAACTGAGGGGAGACCCAGTTCCACACCCACCCA

FIGURE 3, page 55 of 61

CCTAGCAGTGTCTCACACCCACCGGGAGAGGTCTAAACATCTCCCTGGGAAATGGTCCC
AAAATGTCCCTGCAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTAAAG

105338 ATGACTGGGGTGGGTGTGGCAAGTGATGAGGGTTTGGAGTTCATGTGGTGGGGTGGCAGG
GACCAGGTGTCTTGGTAACTGCTGTTGCATTCACTTCAGGAGCAAAGGACCAGATCTGAT
TCTGCAGGATCAACAATATGGACACTGCAGGCTCTGTAGACATCCAAAGCTCTAATGGTG
ACTTGGGGAAGCTCAGGAGGGCAGGAGGTTGTACCCATTTAGAATGTAAAGATTCCCTAT
TTTATAAAAAAGAAAAAAGGAGACTGAAGGCCTCAGTCTCTCCAACAAAGCCAGGCTG
[T, C]
GGGGTAGCAGAGTCTCAAAGGGTGCAGGCCCATGGCCACTGCCCAGGGCTCCTGCTCAGG
CCTCCTCACTCCACAACCTGAGGGGAGACCCAGTTCACACCCACCCACCTAGCAGTGTC
TCACACCCACCGGGAGAGGTCTAAACATCTTCCCTGGGAAATGGTCCCAAATGTCCCTG
CAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTAAAGCTCCAATAAATA
AATAAATGAAGGAAGAAAAAAGAAAGAAATGCAGAACAGGGTGACTAAAATTGGCAT

105570 ATTCCTATTTTATAAAAAAGAAAAAAGGAGACTGAAGGCCTCAGTCTCTCCAACAAAG
CCAGGCTGTGGGGTAGCAGAGTCTCAAAGGGTGCAGGCCCATGGCCACTGCCCAGGGCTC
CTGCTCAGGCCCTCCTCACTCCACAACCTGAGGGGAGACCCAGTTCACACCCACCCACCT
AGCAGTGTCTCACACCCACCGGGAGAGGTCTAAACATCTTCCCTGGGAAATGGTCCCAA
ATGTCCCTGCAGTAAGCAACCATCTGGAGAGGCCAGGTCTACATCTGTTTTTAAAGCTC
[C, A]
AATAAATAAATAAATGAAGGAAGAAAAAAGAAAGAAATGCAGAACAGGGTGACTAAA
ATTGGCATGTATTTTAAATGTTTATATTAACAACTAACACCTTTTAAATGAAAAGCA
ATATAATTGTGCTAGCCACAAATCATCGTAGGACTGAGAAAGGAATCGTGATTCTGAGA
GCCCTAGAGTTAATGTGATCCAGCTGGCTCATCCCTGTGACTGCAGAACCTGTTTGGAG
ATAGTGTCAAGTACTTTTTCAGGCCCTCTGTGAATTGCCAGAATGTGTGACATGAGCCAAA

105928 AAAATTGGCATGTATTTTAAATGTTTATATTAACAACTAACACCTTTTAAATGAAAA
GCAATATAATTGTGCTAGCCACAAATCATCGTAGGACTGAGAAAGGAATCGTGATTCTG
AGAGCCCTAGAGTTAATGTGATCCAGCTGGCTCATCCCTGTGACTGCAGAACCTGTTTG
GAGATAGTGTCAAGTACTTTTTCAGGCCCTCTGTGAATTGCCAGAATGTGTGACATGAGCC
AAATTTCCCCCAGCATCCCCGCCGCCGCCACACCCCGACCCAACCCCTCCCCGCCG
[G, A]
CTCCCATAGAATAGTCACTGCCATACAGAAAAAGAGAAGTTTCTACTATTTCTGGGCAAGA
TTTCCACAAACAGTTTGTCCCTTTCTGCTTTCATGAAATAAACCAATTTGGATCAACGTC
AGCTGATGTGCAAAAAATTTCCCTTGTCTCAAAAGCAAGACTGATAAGGAAGCAAAACATGG
GAGGACCTTAGTGGCCGAGCCTTTATGTGTATGTTATTTTCATTGCTCTCATAACTGCCCT
GGGATGCTGTAAGCATGATTCATCCTGTTTGTATTATCAGTTAAATTATGTATCCAAGATT

106459 TAACTGCCCTGGGATGCTGTAAGCATGATTCATCCTGTTTGTATTATCAGTTAAATTATGT
ATCCAAGATTACACAGCCTATCCAGGATTAGAATCAGAGCCCTCGGCTGTGAAGCTTGA
GCTCTTTCTTTTTCAGTCTTCAAATATGATCATGCCATGAAGCAGCACAAGCCAGGAGG
AGCCCAGTGAGGCTGGAGGGGTCCACTGGCAGCCACTCTCCTCCGTGCCCTGTGGTGT
GGGGCAAACTTGGATCTTTCTGAATCTTTTAACTGTTTCCTTCTCTTCCCGTTTTTGTCT
[G, C]
CTGGCTGACTTGTCTTACACTTACTCCTTGCTTATGATACTTATTTTCCATCCACAGC
AAAACAATTACATCAAGGTAATTGATGATGAGGCATATGAGAAAAACAAGAATTACTTC
ATTGAGATGATGGGCCCCCGCATGTTGGTGGATAGAGTTTTCAGAAAGGTGTAGTACCCTGT
CCTCCACACTAACACTAACATCTTCTCTCCTCTTCTGTTTCTCTCTCCAACCCATTT
GTCTCCTCCTCTCTTGTCTTCCACCTCTCTGGTTCCCTTTCCCTTGTCTCTCTCTTGC

107710 CTTCAATGACCCCATACATCCCATGGCCTCCAATAGACAAGTCAAGAAGTCCTTTCTGA
ATAGATCATACTGTGGAGCAGGGAGCTGCCAGTACTGAGGGCAATGTTCTTCCCTTCC
AAGCTGTCCCTCATGCCCTCCAGTACATGCCTGTTGTACAGAGCACCCCAATCCCATCC
CACAGCAGAGTTCTTGCAGCAGAGAAACAGGCTCACACCTTGTAGACAGCCCTGGGGTCC
CATATCTAGGGCCAACAGAAATATTTCCAAAAAATGCCTTGTGACATCAATGAGCTTT
[C, G]
TCTTTTGTCCGTGAGCAAGGTATAAAAAAGATGTCAAAGAAGTACCCAAAAAGGTAATA
AAAATGTACAGTCGTGCATCACTTAGCAATAAGGATACATTCTGAGGAAGGTGCTCTTAA
GCAATTTTGTCTATCGTGGGAAAATTATAGAGTGACTTTTCAAAACCTAGATGGTGAGC
CTACAACACACCTGGACTATGTGGGCCTATTGCTCCTAGGCTACAAACCTGTACAGCATG
TGCTTGTACTGAATATTGCAGGCAACTGTAGCACAATGGTATTGTGTATCTAAACACAT

108062 AAGGTAATAAAAAATGTACAGTCGTGCATCACTTAGCAATAAGGATACATTCTGAGGAAGG
TGTCCTTAAGCAATTTTGTCTATCGTGGGAAAATTATAGAGTGACTTTTCAAAACCTAGA
TGGTGTAGCCTACAACACACCTGGACTATGTGGGCCTATTGCTCCTAGGCTACAAACCTG
TACAGCATGTGCTTGTACTGAATATTGCAGGCAACTGTAGCACAATGGTATTGTGTATC
TAAACACATCTAGACATAGAAAAGGCACAGTAAAAATATCGTAGTATATAGCCTTATGGG
[G, A]
CCACTATTGTAGATGTGGTCTGTCTATTGAGCAAAACGTTTTTATGTAGCATGTGACTGTA
CTTGTAAGTACACACACCACAAATGCACAGCAAGTCTGTGCCCTACAAGCCCTTTGG

GTCAGTCTACTACATTATAAATGGCAAAGCCGAGCACGCCACAGAAGGTAGCAGGAACA
TCAGAGGATCTGAAGAGACATTTAGGTAAATGCTCTTTACCCCTTAGAGCATTAGTTCT
TAGGCCCTCCCCTCCCCAATCTCCCCCGCCCCCGCCAAAAAGAAAAAGAAAAAGAAA

108214 GGCTATTGCTCCTAGGCTACAAACCTGTACAGCATGTGCTTGACTGAATATTGCAGGC
AACTGTAGCACAAATGGTATTTGTGTATCTAAACACATCTAGACATAGAAAAGGCACAGTA
AAAATATCGTAGTATATAGCCTTATGGGACCCTATTGTAGATGTGGTCTGTCAATTGAGC
AAAACGTTTTTATGTAGCATGTGACTGTACTTGTAAAGTACACACACCACAAATGCACAG
CAAGTCCTGTGCCCTACAAGCCCCCTTTGGGTGAGTCTACTACATTATAAATGGCAAAGCC
[G, A]
AGCAGGCCACAGAAGGTAGCAGGAACATCAGAGGATCTGAAGAGACATTTAGGTAAATG
CTCTTTACCCCTTAGAGCATTAGTTCTTAGGCCTCCCCCTCCCCAATCTCCCCCGGCC
CCCCGCCAAAAAGAAAAAGAAAAAGAAAGCAGAAAATTACAATTCTGGCTCACTAGTAGG
ACCTGTAGCCACCATTTGTGATTCCATGAAGGACCAGAAAGAACCATATAGGAAGAAATCA
GGCCACACGGCAACCTCTCCACATGACAAAGAGCCAGTCTTTGGAGGGCAGTGAATTC

108364 CACTATTGTAGATGTGGTCTGTCAATTGAGCAAAACGTTTTTATGTAGCATGTGACTGTAC
TTGTAAAGTACACACACCACAAATGCACAGCAAGTCTGTGCCCTACAAGCCCCCTTTGGG
TCAGTCTACTACATTATAAATGGCAAAGCCGAGCACGCCACAGAAGGTAGCAGGAACAT
CAGAGGATCTGAAGAGACATTTAGGTAAATGCTCTTTACCCCTTAGAGCATTAGTTCTT
AGGCCTCCCCCTCCCCAATCTCCCCCGCCCCCGCCAAAAAGAAAAAGAAAAAGAAAG
[C, A]
AGAAAATTACAATTCTGGCTCACTAGTAGGACCTGCTAGCCACCATTTGTGATTCCATGAA
GGACGAGAAGAAACCATATAGGAAGAATCAGGCCACACGGCAACCTCTCCACATGACAA
AGAGCCAGTCTTTGGAGGGCAGTGAATTTCAAGGAAAGTTTTCTTCCCTGGGTGACTTGT
TTTTAAAGATGTTATGTTTTGTTGAGATACCCAGAGATGAACAGAACTTCCATCACCT
TGTGCCCCAGACCCATGATAATTACATTGAGGAAACAGTTTTTGAACACATCACCCCT

108657 AAGAAAGCAGAAAATTACAATTCTGGCTCACTAGTAGGACCTGCTAGCCACCATTTGTGAT
TCCATGAAGGACCAGAAAGAACCATATAGGAAGAATCAGGCCACACGGCAACCTCTCCA
CATGACAAAGAGCCAGTCTTTGGAGGGCAGTGAATTTCAAGGAAAGTTTTCTTCCCTGGG
TGACTTGTTTTTAAAGATGTTATGTTTTGTTGAGATACCCAGAGATGAACAGAACTTC
CATCACCTTGTGCCCCAGACCCATGATAATTACATTGAGGAAACAGTTTTTGAACACA
[T, A]
CACCCCTAAGTGATAGAAGCCCAAAGGTGATTTAGAATTTGATGATTTACATCATTTTCT
TCAATTTTCCAGAAAATGCATCAGCTGTAAATAGTAAAGGATTCCTATGTAATATTGTG
GTTAATACATATTTATTTTAGTTCCCACTGAAGCCCTATGAGATAAAGAATGAGAAA
GATCACAAATCTACCTCCCTTTCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
TCT

109746 GCTCCAGGTGACCAACCAATCTACCGACCCAGTCGACACACTCTCTCTCTTGTGTCCCT
ACAGGAAAACCATAAGGGTTAAATAGTAGATGAGGAGGAATACGAAAGGCAGAGAAAT
TCTTCATTGCCCTTGGTGAACCGAAATGGATGGAACGTGGAATATCAGGTGTGAGATTCT
TTAAAAACAAACAAACAAAAAGAAAGAAAAATTAAAAACAACTGAAAAACAACAAC
AAAAAGAAAAAGCAGCTATATTTTTGTCTCCCTCCTTTTCTTCCCTTCTCTCTCTTCT
[C, T]
TTTTTGACCAATGGATTTTTTTTATTCTTTTCCCTCCTGTATTCTCGCTCTCACCCCTGTTT
CGGTATCATCTCTGCCCTTCTTAGCCCTTAGCTTATTCCAAATTCCTCCTTTACCGCCTCT
GGGCAGCACTGCAGCCTCAACTCCTCATTACCCCTAATGAGTTATTTCCCTGTTTTGCTAC
AATTTTCAATTATTCAATTGCCATGGGCCCCCTGCACCTCTCCCCACCCACCCCTACACT
GTAACCTGTAAATGTGAAAATTCCTTGGTGGGTGGGGAGGAGAAGAAAAAAGGAATGT

111484 ACAGGCCTTCTCAGTGTGATTGGTCATTTCTCATTGTCTGCTGGGGACTCTCTGCAGAG
CTGACCACTTCTGTGCTGCGCTGGTTTGGACACACCTGATGCTCTAGGGGCAGAACTCC
TCTCCTTCTTCACTGTGTTCTCTTCGTCAACCACTCAATAAAACGTTGCCCTCAGCCTG
ACTGCCAAAAAGTGCTGGAAGAAAGAAATTATCTCTGGTTCTATTGTTTCCACATTGTA
TTCTTGCCCAACTTCCAGTTCTTGCCACCAACAATATTCTCAGAGGTTGCCCTCAGCACCT
[G, T]
CCCTACCTCATTCCCACCTCCCTTGAGCATTTATTCCATGTATTCTATAATTGGTTGGAAG
CAGCAGATACCCCAAGGCCAATTGTAAGTCACCTTCATCAGTTTCCACAGTCCAAGCTACT
TAGATGCAAAACGAAAGCAGCACATGTACAGCGTACAGGAAGGAAGGCAGTGGTTCCAGAC
AAGAGGAAGAGATTGGAAGTCCATACATGCCTTTATTCCACAGTAAAAAGGCTCTTCTC
TTATGCCTCCCTTAAACCTCTACCAACAGCAGGACAGAGAGTGACCCAAGATAAGTCTT

112879 TTGGTCTCTCTTTTTCGACAACCGTGGGCTCATCTTGACAAGCTGCCAGATGCTTCTTA
ATTACTCACAGTCTTATGCTCTTTCCAGCTTGTCCCTGGGGTGTCTGAGCAGGAATAAAT
GACTCTCACCTGACCCAGGGGATCAATACAGGGGAAAGTTCAGCTCCAGCTTCTCTCATG
AGCAGCAGCAGGAAAAACACCTCGAGGTATTGTGTGAGTCAAGCTGGCCTACCCAGGT
CTTGCTGACCATCTATAACTGCTGAGCAGAAAGTCTTGGATTCTGAGAGACAATGACCA
[A, G]
AGAATGATGGAATTCCAGCCAACCTGCAGGCCTTCTCACTACTCTAGGGATGGGCCAGATG

FIGURE 3, page 57 of 61

TTCGGTGGCATGTATGAGTGAAAACAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTT
TGTCTGACCCACCTGTGTTTCATTTATGTGCTGGGATCTCTGATCTCCCCTGGAACCTGGG
GGAAGCTCTTCCACGCAAACCTCCCGAAGGAGCAGAATAAACAAAGCTCTTGCTATCTAT
CTATCTATCTATCTATCTATCTATCTATCTATCTATCTACCTATCTGCCTATCTATATCT

113245 TGGCATGTATGAGTGAAAACAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTTTGTCT
GACCCACCTGTGTTTCATTTATGTGCTGGGATCTCTGATCTCCCCTGGAACCTGGGGGAAG
CTCTTCCACGCAAACCTCCCGAAGGAGCAGAATAAACAAAGCTCTTGCTATCTATCTATC
TATCTATCTATCTATCTATCTATCTATCTATCTACCTATCTGCCTATCTATATCTATCTA
TCTCAATGTAGTGAGGAAAGCCATTGATCCATTAACCTTTGGAATTCTACATGGGAGATA
[C, T]
CTAAAAAAGTGAACCTGCCTTGTTTATGTATCATGCAGACTCTGGATCCACATATATCTCA
GTGGCTGTGAATATAGGATGATTGATCACAGGCCTGAGTTGCATTCTACAGATTCTTAG
GAAAAAATTGATTACAGACATGTCCCCCTGGTTCCCCCACAACACACACTCCTTCCT
CAGCAATCTCTATCAGTCACCAACTACACGTTGAATATGTGGCAAGCTCTTCCAGACCT
TTATCTGAGAGCCAAGGAGTGAGGGGCTGTACTAAGATATCATAGAAATGAAAATGTGGT

113265 CAGGGCATCAGGGACCTTTCTGGAAGAGCTGCCTTTGTCTGACCCACCTGTGTTTCATTTA
TGTGCTGGGATCTCTGATCTCCCCTGGAACCTGGGGGAAGCTCTTCCACGCAAACCTCCCG
GAAGGAGCAGAATAAACAAAGCTCTTGCTATCTATCTATCTATCTATCTATCTATCTATC
TATCTATCTATCTACCTATCTGCCTATCTATATCTATCTATCTCAATGTAGTGAGGAAAG
CCATTGATCCATTAACCTTTGGAATTCTACATGGGAGATACCTAAAAAAGTGAACCTGCCT
[T, C]
GTTTATGTATCATGCAGACTCTGGATCCACATATATCTCAGTGGCTGTGAATATAGGATG
ATTGATCACAGGCCTGAGTTGCATTCTACAGATTCTTAGGAAAAAATTGATTCACAGA
CATGTCCCCCTGGTTCCCCCACAACACACACTCCTTCCTCAGCAATCTCTATCAGTCAC
CAACTACACGTTGAATATGTGGCAAGCTCTTCCAGACCTTTATCTGAGAGCCAAGGAGT
GAGGGGCTGTACTAAGATATCATAGAAATGAAAATGTGGTGTGTCAAGTTTCCTTAAT

113497 GAGGAAAGCCATTGATCCATTAACCTTTGGAATTCTACATGGGAGATACCTAAAAAAGTG
AACTGCCTTGTTTATGTATCATGCAGACTCTGGATCCACATATATCTCAGTGGCTGTGAA
TATAGGATGATTGATCACAGGCCTGAGTTGCATTCTACAGATTCTTAGGAAAAAATTG
ATTCACAGACATGTCCCCCTGGTTCCCCCACAACACACACTCCTTCCTCAGCAATCTCT
ATCAGTCACCAACTACACGTTGAATATGTGGCAAGCTCTTCCAGACCTTTATCTGAGAG
[C, G]
CAAGGAGTGAGGGGCTGTACTAAGATATCATAGAAATGAAAATGTGGTGTGTCAAGTT
TCCTTAATTCTTAGATCTTAAACTCTAAGAGGGTTCAGCATAAGTACAAATTCAAGGGCT
AGAGACAACCTGATTGGGTGTGCTTTAACTCAGTTTCCCAATCCACATAGGGACCTTG
CATTTGTCATCTCTCATCTATGTATAGCTGTTGGTATGACAGTTTCTCTGTTCCAGAATA
CCTGAACCTCTGACTTAGCCTGTCTTTCTGAAACAGAAAAATCACCAACCAGAGATCTA

114486 CCCCATGGTCATTTTTGCCACTCATAAGTTAGCTACTCTGGCAGGGTTGCAACTTACACA
GTTTTTCATGATAACTGGATTCTCACTCCTTTTTTTACAGAATGGATGTGATAACCTGGTA
TCCACACAGTATGATGACAGCAACCTACCCATTGGTTCCCATCTCATTCCTCCATT
CCTAGCCCTAGGGTAGCCGGGAAAGCATAGGAGCAAATGCCCTTACCAGGGCCCTGGTGC
TCAGCAGCCTCTCCGGCTGCTCACACCTCTTGCTGCTGCTCTGTGCATGCTCCAAAGGCT
[G, T]
CTTTTTGCGTATGGCTGCTGAGCTCTCACCTACTAAGCTCTCTGCTTTCCTTATGCTGCC
AGCAACCACAAAACCTGGTGATACTTTCAAGATGGGACATTAATGCTCTTTCTTTCTT
TCTTCCATTTTCTGGTATCCATTGCAAACAGCGCTCCTGTTATCTCCAGGTAAGAGGT
GTCTTGCCCCCTCTTTCTTTCCACTTCTTGCCAGTGCCATTATTTGGTTTAAAGACCAA
TGTCCTTTGATTTATTGAATAAGAACTGCAGGCTCAAGTTAACCTGACAATTTCTCCCAA

114686 GAAAGCATAGGAGCAAATGCCCTTACCAGGGCCCTGGTGCTCAGCAGCCTCTCCGGGCTGC
TCACACCTCTTGCTGCTGCTCTGTGCATGCTCCAAAGGCTGCTTTTTGCGTATGGCTGCT
GAGCTCTCACCTACTAAGCTCTCTGCTTTCCCTTATGCTGCCAGCAACCACAAAACCTGGT
GATACTTTCAAGATGGGACATTAATGCTCTTTCCTTTCTTTCTTCCATTTTCTGGTAT
CCATTTGCAAACAGCGCTCCTGTTATCTCCAGGTAAGAGGTGCTTGTCCCCCTCTTTTC
[T, C]
TTCCACTTCTTGCCAGTGCCATTATTTGGTTTAAAGACCAATGTCCTTTGATTTATTGAAT
AAGAACTGCAGGCTCAAGTTAACCTGACAATTTCTCCCAAGGACTGGGAGATTATTTTC
CCACATGAAGCAATTATGAGAAAGCAATTGTGAGGAAGGCAATTCTTGAGCATCACTTC
TGTCTGGGGACGTGGGTAAAGGCATAGCTGATCCTCTCTGGGACCAGGAAGAGAAATTAA
GCTTAAACAAGGAGATGGTGGGTCATAGACTTCTCCTGAGTCTTAATTCATCTGCCATCTC

114817 TACTAAGCTCTCTGCTTTCTTTATGCTGCCAGCAACCACAAAACCTGGTGATACTTTCAA
GATGGGACATTAATGCTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCTTTCT
CAGCGCTCCTGTTATCTCCAGGTAAGAGGTGCTTTGTCCTCTCTTTCTTTCTTTCTTTCT
TGCCAGTGCCATTATTTGGTTTAAAGACCAATGTCCTTTGATTTATTGAATAAGAACTGCA
GGCTCAAGTTAACCTGACAATTTCTCCCAAGGACTGGGAGATTATTTTCCACATGAAG
[C, A]

FIGURE 3, page 58 of 61

AATTATGAGAAAGCAATTGTGAGGAAGGCAATTCCTTGAGCATCACTTCTGTCTGGGGAC
GTGGGTTAAGGCATAGCTGATCCTCTCTGGGACCAGGAAGAGAAATTAAGCTTAACAAGG
AGATGGTGGGTCAAGACTTCTCTGAGTCTTAATTCATCTGCCATCTCATGTTGTGGGG
GAAGAGACAGTGAGATTGAGAGCTGGAATCTCCTAATATAATTGTGACAGGATTGAAAA
AAAAATACTTTAAATCCCAAGGGATCCAGGAAATAACCAACCTGTTGTGAGAATAGGAAA

115600 AGAGAATTTATTTTGAAGAGATTCTCATGCAGAATCTAGGTGCTATAGAGGACGTACACC
TACTTTGAGAGTATGCTTGCATGAGTGGAAACCAATCATAAACAACATTCAACTTCATGA
GCAGATATGAAAGCATTTCAGCATATCTAGCAATACTATAACTCTTTGTGCAAGCAGAG
TGGCCTACACAAGACAGTTTCAATATATTTTAAAAGAACGTCTTACATTTTCATCAGTCCT
TTGAACACAGAAAAAATGTTAAGGCCACTTAAGAGGCAAAACATCTTACAGAGTTCATT
[G, T]
ATATTCAAAGTCACCTACAGGCTACATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAA
GGACATACGCCTTCTGGGAGCCTTAAACAAACAAAAAATGTAGGTAACCTCTACATTT
TTCTTTTGTGAAAAAACACAGTTACTCCAGCTTCCTTGGCTTTTGTCTCTTTTATA
CCAACAAATAAGGGCTATCCTCAACCTCTGTTCTTCTTCTCTCCAGGGTATTGAT
TTCATAACATTGGGTTTTCTTCTACTTCACTCATCCTCTTGCCTGTGAAGGTATGTA

115668 GAGTATGCTTGCATGAGTGGAAACCAATCATAAACAACATTCAACTTCATGAGCAGATAT
GAAAGCATTTTTCAGCATATCTAGCAATACTATAACTCTTTGTGCAAGCAGAGTGGCCTAC
ACAAGACAGTTTCAATATATTTTAAAAGAACGTCTTACATTTTCATCAGTCCTTGAACAC
AGAAAAAATGTTAAGGCCACTTAAGAGGCAAAACATCTTACAGAGTTCATTGATATTCA
AAGTCACCTACAGGCTACATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAAGGACATA
[A, C]
GCCTTCTGGGAGCCTTAAACAAACAAAAAATGTAGGTAACCTCTACATTTTCTTTTG
TGAAAAAACACAGTTACTCCAGCTTCCTTGGCTTTTTGTCTCTTTTATACCAACAAA
ATAAGGGCTATCCTCAACCTCTGTTCTTCTTCTCTCCAGGGTATTGATTTCATAAC
ATTGGGTTTTCTTCTCTACTTCACTCATCCTCTTGCCTGTGAAGGTATGTAAGGCTTCT
TTGTTCCAACCTTTCTCTCCACCGCCCCCTCACATAAATGCATAACAAAGATTGTGA

115745 ATCTAGCAATACTATAACTCTTTGTGCAAGCAGAGTGGCCTACACAAGACAGTTTCAATA
TATTTTAAAAGAACGTCTTACATTTTCATCAGTCCTTTGAACACAGAAAAAATGTTAAGG
CCACTTAAGAGGCAAAACATCTTACAGAGTTCATTGATATTCAAAGTCACCTACAGGCTA
CATCTTGGGTTTCAGGAAGGGGCGGTGTACATAGTAAGGACATACGCCTTCTGGGAGCCTT
AAACAAACAAAAAATGTAGGTAACCTCTACATTTTCTTTTGTGAAAAAACACAGTT
[A, G]
CTCCAGCTTCCTTGGCTTTTTGTCTCTTTTTTATACCAACAAAAAAGGGCTATCCTCAA
CCCTCTGTTCTTCTTCTTCTCTCCAGGGTATTGATTTTCATAACATTGGGTTTTCTTCTC
TACTTCACTCATCCTCTTGCCTGTGAAGGTATGTAAGGCTTCTTGTTCACCTCTTTCC
TCCACCGCCCCCTCACATAAATGCATAACAAAGATTGTGATTTAATTTAAGTTTCTT
TCTACTTTTAACATATTTGCAACATCAATAGAAGCTAAAATGGGAAAAAGGAAATGTTT

117230 AATAATACTGTCGCTGCTAAGATAGGCATTGTGATATGGTGCTTAAACCTGCAAGTAAAG
GAAAGAGATATGGAATCTGTGTCTTTTTCTAAGGGCTTTTTCCAGAGTAGCTTGACAG
TCTGGCTTCTAGGGTTGCTGGCCTATAGCCAGAACCCTAGATTCACCCAGATTACCTTC
AGATTAATACTAATCAGAGACTCAAATTCATAGACTAAATGAAGTCAGGCTGTAGAGGA
TGCTGCTGACTTGGACATATGCAGAAAGACATGGATCCTTGAGAAAACATTGTTCCAA
[A, C]
AGTGGCCACCAGCACTAGAGGAAGGACAGCACCGGACAGCTCCAGACATTTTAGGAT
TGCTTCTGTGTTTGGTCCCGAACCTGAGCAAAACAGCGAACTCAGGAAGTCTCCACA
CACTCTCATACCATCTTCATGCACTCAACTAAGAAAATCTTACATAAAATATAAGGCT
GTCTGCTTGGTAAATTTAAACCTTGGCTTATAGTCTTTTCAGTGAATTTCTTCTTGC
AACTCGAGAGTTGAGGCTCACGACTGCCCTTGCTTCACCAATTCCCCAGCTAGAGACAA

118908 CCCATTTGTAACATGAACAAATAGTGCTGACCATTTGTATGCTAGGAATATTGTTAGGA
AACAAATATAGAATGTGAAATAAGTGGACTAGAAAGTCTGAGATGATTATCATTATT
GTTTAACTGTGTTTTTAAAGCAAAAATATTAAACTCACTACTACAGGGCAAGATATATT
AACATCATTATTATTATTATTATTATTCTAAATAGCCAATTTCAAAGTCACAA
CCAGGCCAGGCTGAGGGACTCACGCCTGTAATCTCAGCACTTTGAGAGGCCGAGATGG
[A, G]
AGGGTCACTTATACCTAGGAATTTGAGACCAGCCTGGGCAACATAGGGAGACTCCATCTC
TATAAAAAATAAAACAAAATAAAATCAGCTCAGTGTGGTTGTACATGCCTGTGGTCCCA
GCTACTCAGGAGGCTGAGGTGGGAGGATGGCTTGAAGCCAGGAGGTTGAGGTTGCAATGA
GCCATGATTGCACCACTGCATCCAGCCTGGGTGACAAAGTGAAGCCCTGTCTCAACAA
AACAAAAACAAAAGATTACAACCAAAAACAAAGGGAATAGAAGGATTGCCTCAAAAGAG

120430 CCCCAAGGCCCCAGAGCCAGAGCAAAAGACAGCCAGGAAGAGAGGTTTGCTGCTGCTGC
TGCTGCTGCTACCCCACTTTTCTCATCACCTGCTTTAGATCTTTCTAGCTCCCCCTCTGA
TGACCTGACTGTGCCCCCTCAAGACAATAAACGGAATGTAGGCCACATCATCTACCTGCT
CCTTTTACAAAGGAGGGGACTGAGGTTGAGAAATAAGAGATGATTACCCAGCTTACAG
ATTTTCTTCATGGCAAAGCTGGAATGAGAACCAGGTGTTCTGACTCCTGTTCTTTCAA

FIGURE 3, page 59 of 61

[C, A]
 CCCAGCTTCTACCGGTTATGCCAAAACATGACAGAAGTTGCCGTTGGCAAGGCACAGGCA
 TGCCCTCAGCATACCCCTCCCTCCAGGGCTGCTGAGTGGGCAACTCTGCCACATTTCTGTG
 GCAAGGACAATCAAGGCCATCTGCTTTTCCCATGAGATGTTTGGAGGAGGGCACTGG
 CTCTGCAGTATATTTCTCGTGATCTGGAATGACAGCCATCCCTCAGGGGACAGATAATGAC
 CAGAACCACAATGGTTATTGACAGAGTCAGGTGAGAAAATTTGAGAGGAGCCCTGCTGGC

120830 CAACTCTGCCACATTTCTGGCAAGGACAATCAAGGCCATCTGCTTTTCCCATGAG
 ATGTTTGGAGGAGGGCACTGGCTCTGCAGTATATTCTCGTGATCTGGAATGACAGCCATC
 CCTCAGGGGACAGATAATGACCAGAACCACAATGGTTATTGACAGAGTCAGGTGAGAAAA
 TTTGAGAGGAGCCCTGCTGGCATCCAGTGAAGAGTGGCCACACCGAACTGATTTCACCTC
 TCTCCTTAGACACAAAATGCAGCCTGTGCATTCTCTTTTCTTTTTTTTAAATTATAC
 [A, T]
 TTAAGTTCTGGGGTACATGTGCAGAACATAGAGTTTGTACATAGGTATACACGTGCCA
 TGGCGGTTTGTGCACCCATCAACCCGTATCTACATTAGGTATTTCTCCTAATGCTATC
 CCTCCCTATCCCTCACCCTGACAGGCTCCAGTGTGTGATGTTCTCTCCCTGTGTCCA
 TGTGTTCTCATTTGTTCAACTCCACTTATGAGTGAGAACATGCAGTGTGTTGTTTCTGT
 TCTGTGTAGTTTGTGAGAAATGATGGTTGTCATCCTCTTCTTTCTGCTCCACTGTC

121926 TTGGTCTCAAAGATTGAGTCACAGCTGTTGTTTTCGTGGCATTGGCACCTCTGTCCCAG
 GTGAGAGTGAGAGGTGCTTGAATTTGCAAAGAGGATTTACCTGGTTCAAATGACCCCTG
 GACTCCATCTCATTATCTTCCACACCATCTCAGATCTGAACCTAACAGAGCCTCTGCCCT
 TAAAGTGACAAAAAGTCAATCAAAGAGATGAATAATGACATTAGTAATGACAGCTAATAT
 TTCTTGAGCATTCAATGTGACAGACCATGTGTGTTGAGCAATTTACACATTTACAT
 [T, C]
 TTCCCCCTGTAATGTTTCCCAAAGCCCTATTAATAGGGTAAGTTATTATCCCCACTTCA
 CAGACAAAGAACTGAGGCCCACAGAGGTTAAGCTACATGCCCAAGTAAGTGGTCCAATT
 TCTTAACCTCCACATTATGTGAGTAGACCACAAACAGTGAAATTAAGAAGTGTAGATAT
 TGTTCCTCTCTATTACCTCTGGCGATCTCTGAGAGGTTAAGATTAGCCAGCTCAAAG
 ATATCAAAGGAGAAATGCCACATACATTCTTGGCCTCCTCTACTTGAAGGACACTGTG

122102 CCCTTAAAGTGACAAAAAGTCAATCAAAGAGATGAATAATGACATTAGTAATGACAGCTA
 ATATTTCTTGAGCACTTTCAATGTGACAGACACCATGTGTGTTGAGCAATTTACACATTT
 ACATTTTCCCCCTGTAATGTTTCCCAAAGCCCTATTAATAGGGTAAGTTATTATCCCA
 CTTACAGACAAAGAACTGAGGCCCACAGAGGTTAAGCTACATGCCCAAGTAAGTGGTC
 CAATTTCTTAACCTCCACATTATGTGAGTAGACCACAAACAGTGAAATTAAGAAGTGA
 [G, C]
 ATATTGTTCTCCTTCTATTTACCTCTGGCGATCTCTGAGAGGTTAAGATTAGCCAGCTC
 AAAGATATCAAAGGAGAAATGCCACATACATTCTTGGCCTCCTCTACTTGAAGGACAC
 GTGAGTACAAAGTATCTCCTAGCAGGACAGCCAAAGGAAATGCCAGCTTTATCTTT
 TTATAGGATGAATTACATACTCTTTCTTTTCTTAGGAACACTCAGAGACAAACAGAAAG
 GAGCGGACATTCCTTTACTCATTGAACAAATATTTACTGAGCACCTATTATGCCTGTTAC

122950 GGGGCCTCTGAACTCTGAACTTCTGCCAGGGAGCTGGCATCCAGTTGCCCGAGAAAGAA
 ACAGAGCACATCTCTGCAGGGAAGTTAGGCTGAATCTCATCAGACAGGACTTTTCTGG
 CTGGGGCAAGGAAATCTTCTGTACCAAGCAAACATATCCTTCAAGAGAGTAGCTGAA
 TTCACATCAAATTTCTAGGAAAACCTCTTTCCAAAACCCAGCGCAGGCCAGCGGTATTAT
 TTGTCCATTAGTGATGCAAGAGATTTAGCTATCGTGGAATGCATCAGAAGGTTGGAAT
 [T, C]
 AGATGGATGATCCAGGAAGGCTGTGGATGAGATGCCCTGTGATCTCTGTTCTCAAGC
 CTTGGGGGACCTGAATATCAGAGGGGAGGGAGGAAATATGGGGGAAAGCATAGAGGTGG
 GAAGAAATATCAGAGGATCAGAGGACAGAAACAAACAATAACACAGAAACAAACAAAC
 AAACAAACAAACAAACAGGCCATAGGCAAGAAAGGTAAGAGGTTTCTCTGGGAGATC
 TAAAAAAATGGCAATAATGAGTAAGCCAGGCAGATACCTTTGGGCATCTCAAGTCCT

123366 GGTGGGAAGAAATATCAGAGGATCAGAGCAAAAAACAACAATAACAACAGAAACAAAA
 CAAACAAACAAACAAAAACAAGGCCATAGGCAAGAAAGGTAAGAGGTTTCTCTGGG
 AGATCTAAAAAAATGGCAATAATGAGGTAAGCCAGGCAGATACCTTTGGGCATCTCCAA
 GTCCCTTGCAATTGGCCAAAGACAACAGCTAACAAACATTTGAGGCTTTAAGAAGGTTACCT
 GTGATCCACTCATCTGATTAGTGGCTTTGGCTGAAGCTCTTTGGATATAGTTGAAGGTA
 [C, T]
 GGAAAGGGTCTTACATGAGGACTTTAGGGTCAAGTCTCTTGCTAACATCCTATGTGACC
 TTGGGTAAATTTCTTGACCTTATTTTCTTACCTGTAAAAATAAAGAATTGGGCTAGAT
 GTCTCTGACAGTCTCCCTGTATCTACAATCTGTGCCAAGATCTAAAGTCAACACCCCTG
 CAAGGCCCTGTGATACATATATAAACACAAAGACAGAGCCCGTCTCCTTGAGTCCAC
 AGTTACCCCTGCATGTCCCATCATGGTTCCCAACATGTCTCTGTCCCCAAATCCAG

124947 GGCCCTGGCAATTAAGTGAAGGGCAAGTCTTAATCAATCAAACAATGGAGGAATCAC
 GACTTTACACAGTATTGAATGAATACAAACAAAGCAACAGCAACAATCCACCTCCACCC
 CATCTCCCCCTCATATCCCTGACCCAAAGCAAGGTCAGAGCCTTTGCGCTCCTTCTATT
 CCATCTTTTGATTATCTCTTTGCCTCTCATTCTTTTGAAGCAGGGTTTCTCCTCTCTGC

FIGURE 3, page 60 of 61

CCAATTCCATATGTCCCTATTATCTCACTCAGCTGACAAGACGTGAAAATGAGTCACATT
 [C, T]
 ATGTGGCTGGGGTGGGGTCTTTTTTCATTGTAATCATTATTGTGGTGGCTTCGTTTGTG
 CCGTTAGGTTTTGCTTATTATTTTGTCTTTTTTCTGAAGTGAGTGAAAAAGGT
 GCCACAAAGGAATTCCAGGTCCGAGCCAACAGAGAGAAACATGAATTTTAGACACATGC
 TCTCCTGCCACCTCTTGGCTCCATCAAGATCCAGTTCCTCATCTACTGTTTTCTCTGAG
 TTCTTGGGAGGAGTGATGGTGTGGGGTAGAAATAAGCTCACTCACCACGCAGGGTACT

125010 TTTACACAGTATTTAATTGAATACAAACAAGCAACAGCAACAAATCCACCTCCACCCCAT
 CTCCCCCTCATATCCCTGACCCAAAGCAAAGGTCAGAGCCTTTCGCCTCCTTCTATTCCA
 TCTTTTGATTATTCCTTTGCCCTCTCATTTCTTTGGAAGCAGGGTTTCTCCTCTCTGCCCA
 ATTCCATATGTCCTATTATCTCACTCAGCTGACAAGACGTGAAAATGAGTCACATTCAT
 GTGGCTGGGGTGGGGTCTTTTTTCATTGTAATCATTATTGTGGTGGCTTCGTTTTGCC
 [A, G]
 TTAGGTTTTGCTTATTATTTTGTCTTTTTTCTGAAGTGAGTGAAAAGGTGCC
 ACAAGGAATTCAGGTCCGAGCCAACAGAGAGAAACATGAATTTTAGACACATGCTCT
 CCTGCCACCTCTTGGCTCCATCAAGATCCAGTTCCTCATCTACTGTTTTCTCTGAGTTC
 TTGGGAGGAGTGATGGTGTGGGGTAGAAATAAGCTCACTCACCACGCAGGGTACTAAA
 GATCTTACAGGAGCTTCAACTGGAGCAGGAGGAGCTTTTATGCTTATGTTGAATCAAGT

126043 AAAGCATTTTTACAAGATAGGAACCTGGAATTCTCTCATTTCTCCCATGTTCTGCTTGTTC
 TTAAACTTCATGAAGCTATTTTTCAGCCTATGGGGTAGTCTTGTCTCCAGTAAGAGGAA
 TCTTAGTGTGTCATAATCCCTTGGAGCCTGGGTTTTTGGAGAAAGAGATCTCCGTGCCCTA
 CAGACCTTTTTCTCAACGAATGTGGGAAGGACCTGGCTTTAAACACGCACACAAACACAC
 AAATAAACAGACATAAGATGTCATCACGAAACTGCCACGGATCTTTAGGCTTTCTGCAT
 [T, C]
 GACATAAATACATTTTCTAAGGGGGGGGGGAAGAAATTAATAAACACCTGTTAATTTTA
 AACACATTTTTTAAGAAAAAATAATTAAAAAAGAAACAGTGCTCATGTCTAAGCTATG
 TTGACAGTTGCCAGTGGAATGTTGGGTGGTTCAAAAAAAAAATAAAGCTATACTATA
 TCTCTCTACATACAGCTTGTCTCTACCTGTGTTCTTCAGTGAAAGGTCCAGGGGGCCAC
 TGTGGGCTTCTGTGAGGAGACGTGACTCAGGTGAAGGTGTCACCTCCTCTCACACTCAG

126064 AACTGGAATTCCTCATTTCTCCCATGTTCTGCTTGTCTTAACTTCATGAAGCTATTT
 TTCCAGCCTATGGGGTAGTCTTGTCTCCAGTAAGAGGAATCTTAGTTGTGTCATAATCCCTT
 GGAGCCTGGGTTTTTGGAGAAAGAGATCTCCGTGCCCTACAGACCTTTTCTCAACGAATG
 TGGGAAGGACCTGGCTTTAAACACGCACACAAACACACAAATAAACAGACATAAGATGT
 CATCACGAAACTGCCACGGATCTTTAGGCTTTCTGCATTGACATAAATACATTTTCTAA
 [-, G]
 GGGGGGGGGGAAGAAATTAATAAACACCTGTTAATTTTAAACACATTTTTTAAGAAAAAA
 ATAATTAATAAAGAAACAGTGCTCATGTCTAAGCTATGTTGACAGTTGCCAGTGGAAT
 GTTGGGTGGTTCAAAAAAAAAATAAAGCTATACTATATCTCTACATACAGCTTGCT
 TCTACCTGTGTTCTTCAGTGAAAGGTCCAGGGGGCCACTGTGGGCTTCTGTGAGGAGA
 CGTGACTCAGGTGAAGGTGTACCTCCTCTCACACTCAGGTGCAATGTGTGAGACCCAG

126283 AAATAAACAGACATAAGATGTCATCACGAAACTGCCACGGATCTTTAGGCTTTCTGCAT
 TGACATAAATACATTTTCTAAGGGGGGGGGGAAGAAATTAATAAACACCTGTTAATTTT
 AAACACATTTTTTAAGAAAAAATAATTAAAAAAGAAACAGTGCTCATGTCTAAGCTAT
 GTTGACAGTTGCCAGTGGAATGTTGGGTGGTTCAAAAAAAAAATAAAGCTATACTAT
 ATCTCTCTACATACAGCTTGCTTCTACCTGTGTTCTTCAGTGAAAGGTCCAGGGGGCCA
 [C, G]
 TGTGGGCTTCTGTGAGGAGACGTGACTCAGGTGAAGGTGTACCTCCTCTCACACTCAG
 GTGCCAATGTGTGACACCCAGTATATTCTAAGCAAAATACTTCAGGAAATGCCACTTG
 TCAAAACCTGGACTTTGCGAAGTTGGAAGATGTAAGTAGTAGTAAAGCTGTGGTAATTA
 TGGAGGAAGGAGGTTTTCTGTATCAGAAAGGCATTGGCCGTGACAGACTC

Chromosome map:
 Chromosome 14